FOUNDED IN 1856

RAILWAY AGE

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GENEVA COLLEGE

JANUARY 22, 1949

diesel electric
steam turbine
reciprocating steam
electric

Baldwin builds them all

6000-hp. diesel-electric passenger locomotive, built for The Pennsylvania Railroad.

Having specialized in the design and manufacture of railroad motive power for more than a century, Baldwin can recommend and build the type of locomotive best suited for your requirements.

A Baldwin representative will welcome the opportunity to discuss your motive power problems with you.

BALDWIN PRODUCTS FOR THE RAILROADS: Locomotives of all types; rolled steel wheels and tires; connecting rods; springs; steel forgings and castings; hydraulic metal forming, wheel and bushing presses; plate planers; bending rolls; static and dynamic testing equipment; track scale test cars.

BLW THE BALDWIN GROUP **BALDWIN**

The Baldwin Locomotive Works, Philadelphia 42, Pa., U. S. A.
Offices: Boston, Chicago, Cleveland, Houston, New York, Philadelphia, Pittsburgh, San Francisco, Seattle, St. Louis, Washington.
In Canada: Canadian Locomotive Co., Ltd., Kingston, Ontario.

YOUR COMPLETE GUIDE TO REDUCED FREIGHT CAR MAINTENANCE IN 1949

A-3
RIDE CONTROL
UNIT TRUCK

BARBER
STABILIZED
UNIT TRUCK

NATIONAL C-1
UNIT TRUCK

SCULLIN L-V
UNIT TRUCK

A. A. R.
DOUBLE TRUSS
SPRING PLANKLESS
UNIT TRUCK

A. A. R.
SPRING PLANK
UNIT TRUCK

ALL TYPE
ROLLER BEARING
UNIT TRUCK

Inland Steel, too, Is Made to *Your* Specifications

• Your corner pharmacist takes pride in compounding your prescriptions carefully and accurately. We at Inland Steel deal in prescriptions, too—your *steel* prescriptions. Being a completely integrated and independent steel company, we are able to supply steel to meet the specific requirements of your job . . . to act quickly when fast action is necessary . . . to maintain a friendly, personal interest in your steel problems . . . and to follow your steel order carefully, step by step, through each phase of production.

INLAND STEEL CO., 38 S. Dearborn St., Chicago, Ill.
Sales Offices: Chicago, Davenport, Detroit, Indianapolis, Kansas City, Milwaukee, New York, St. Louis, and St. Paul.

INLAND STEEL

BARS • STRUCTURALS • PLATES
SHEETS • STRIP • TIN PLATE
FLOOR PLATE • PILING • RAILS
TRACK ACCESSORIES

. . . and
This "Inland Team"
Gives Your Steel
Their Personal Attention

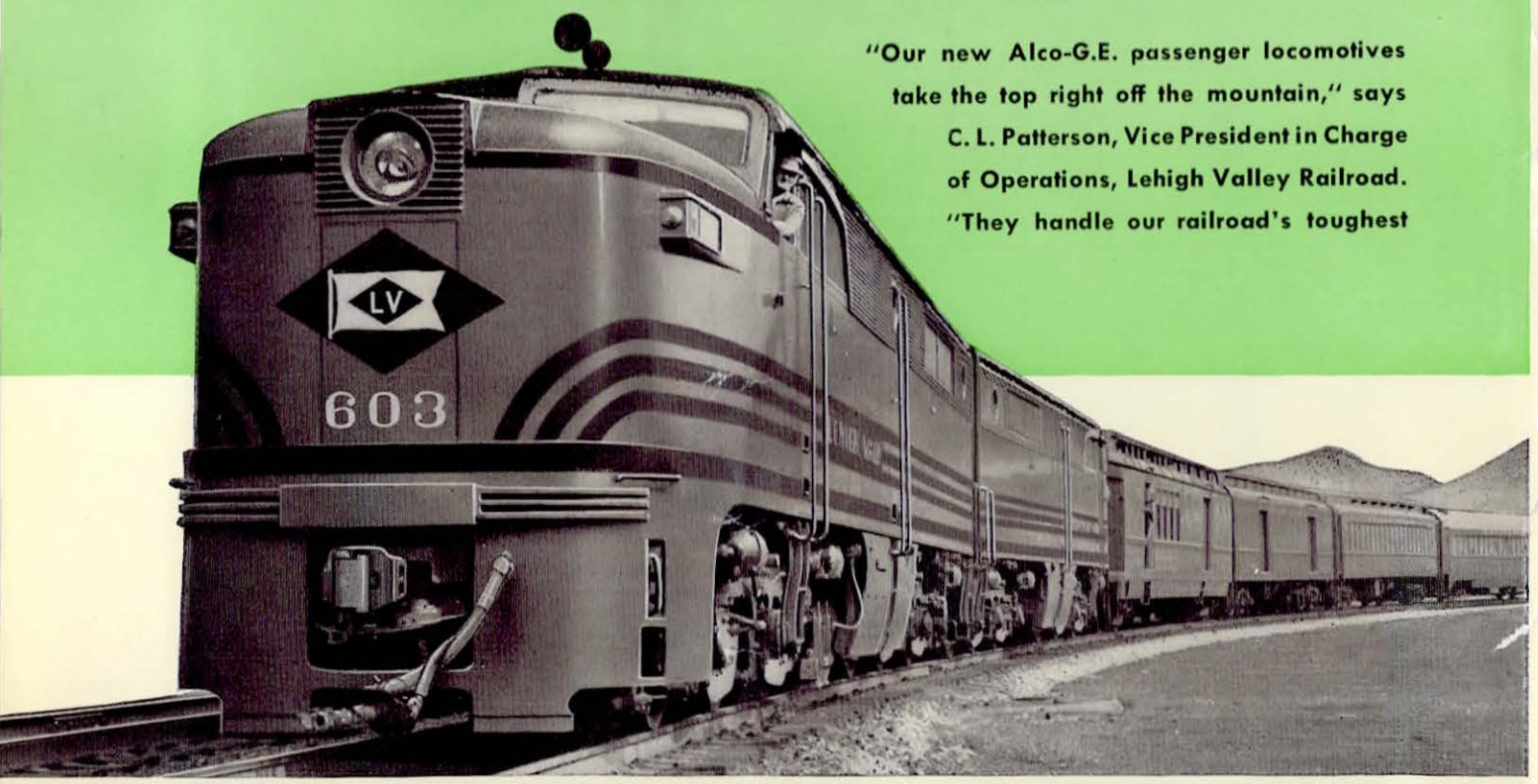
METALLURGY SALES OPERATIONS

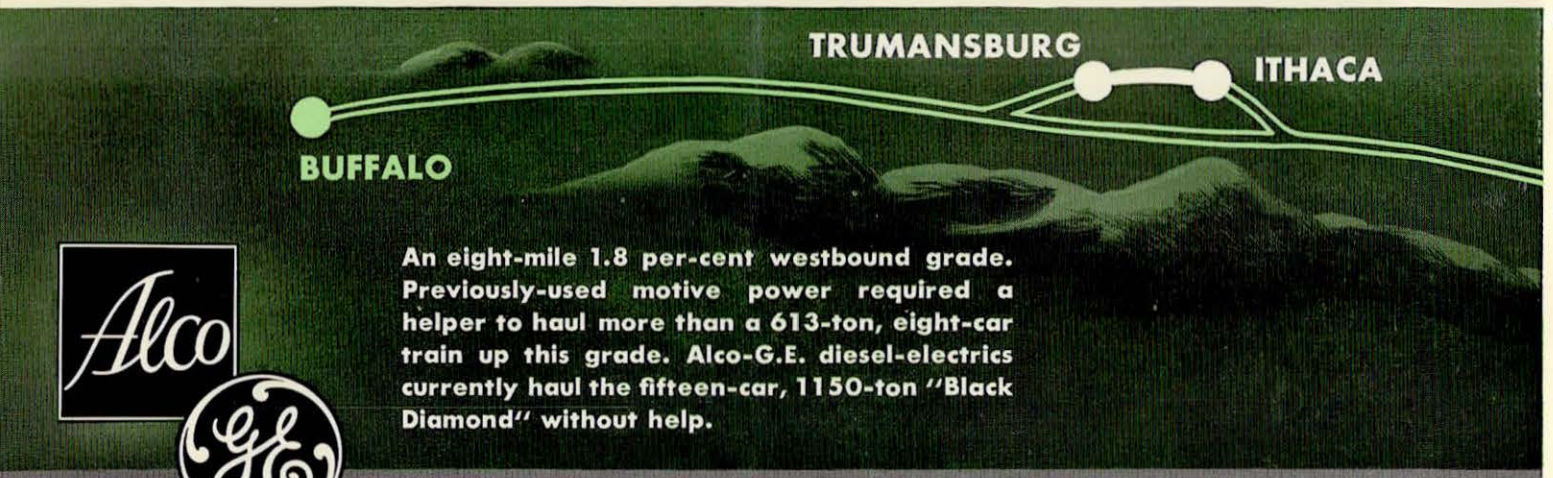
Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year. U. S. and Canada. Single copies, 50 cents each. Vol. 126, No. 4.

ON THE LEHIGH VALLEY

"Takes The Top Off The Mountain"

"Our new Alco-G.E. passenger locomotives take the top right off the mountain," says C. L. Patterson, Vice President in Charge of Operations, Lehigh Valley Railroad. "They handle our railroad's toughest





An eight-mile 1.8 per-cent westbound grade. Previously-used motive power required a helper to haul more than a 613-ton, eight-car train up this grade. Alco-G.E. diesel-electrics currently haul the fifteen-car, 1150-ton "Black Diamond" without help.

AMERICAN LOCOMOTIVE

jobs exclusively in less time, do more work, at considerably lower operating costs."

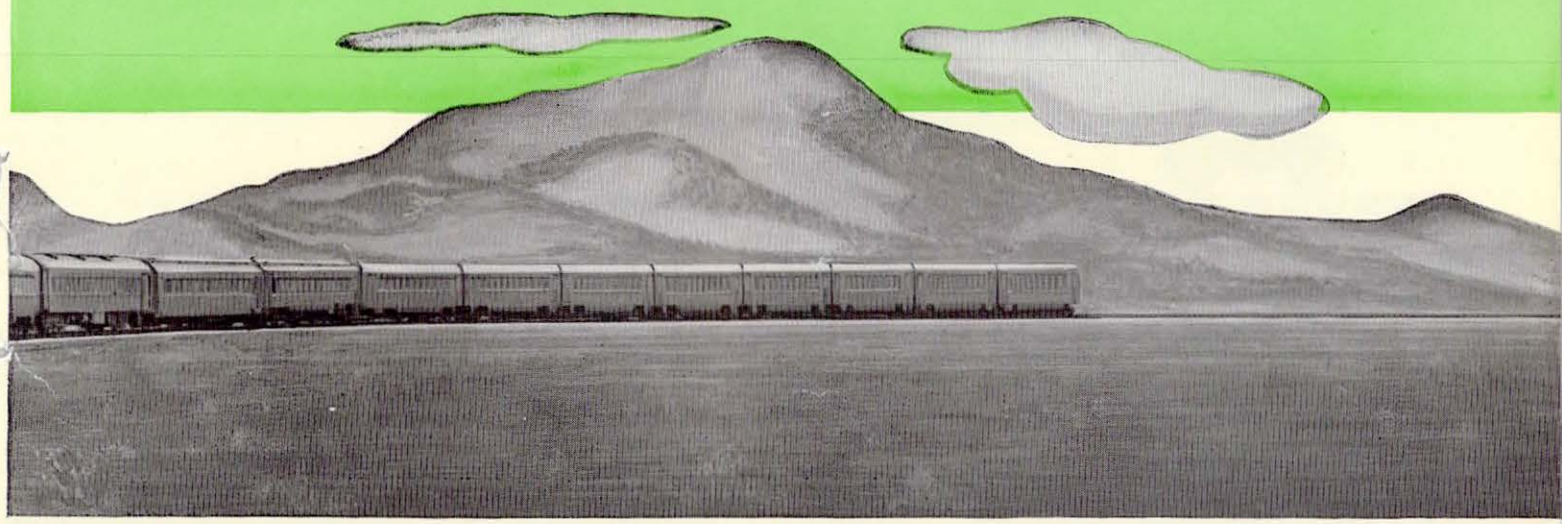
Toughest of these assignments involves eight to thirteen-mile grades of as much as 1.8 per cent near Wilkes-Barre and Ithaca. On these grades, without helpers, Alco-G.E. diesel-electrics are able to haul twice as many passenger cars as replaced motive power. Costly helper service has been eliminated on passenger runs. Passenger schedules between New York and Buffalo have been reduced forty-five minutes each way, with improved on-time performance. This service includes the run of the famed "Black Diamond."

When the Alco-G.E. Survey Service was called in to make a motive-power study of this operation, it predicted substantial savings. "The survey was conservative," says Mr. Patterson, "Operating costs *alone* are down two-thirds."

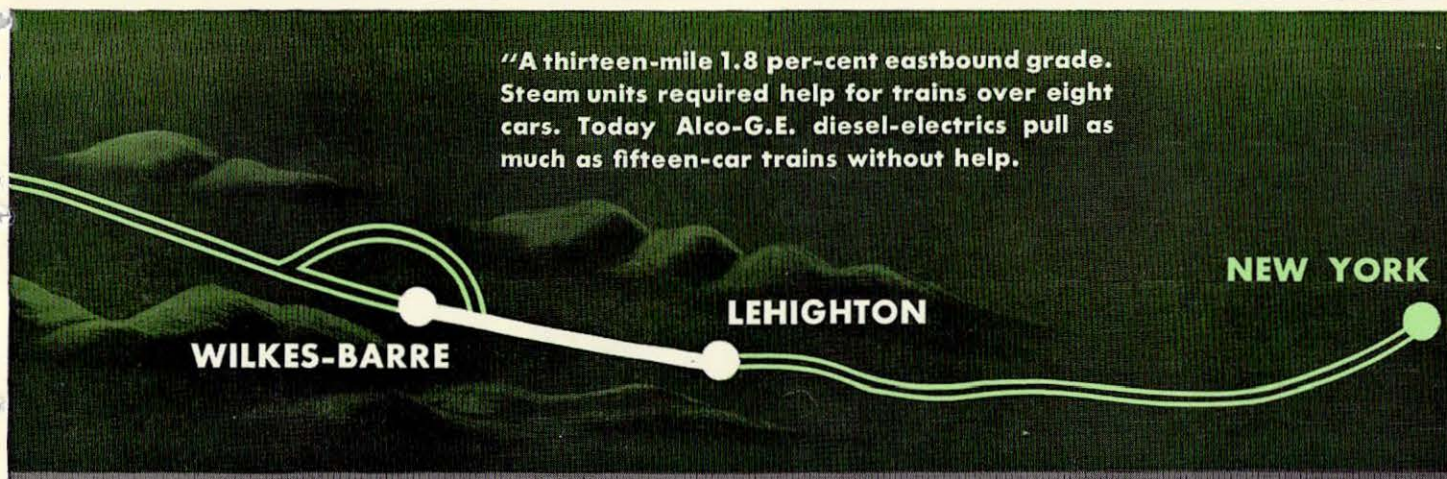
So successful has this Alco-G.E. passenger operation been that the Lehigh Valley will soon put Alco-G.E. units to work on the railroad's toughest freight jobs too.

Such results are tangible evidence of motive-power performance at its best. *Alco-G.E. locomotives move the heaviest loads on fast schedules over the toughest profiles on one road after another.* These same results can be duplicated in your operation. Your Alco-G.E. representative will gladly tell you how.

Built TO DO YOUR RAILROAD'S TOUGHEST JOB



"A thirteen-mile 1.8 per-cent eastbound grade. Steam units required help for trains over eight cars. Today Alco-G.E. diesel-electrics pull as much as fifteen-car trains without help.

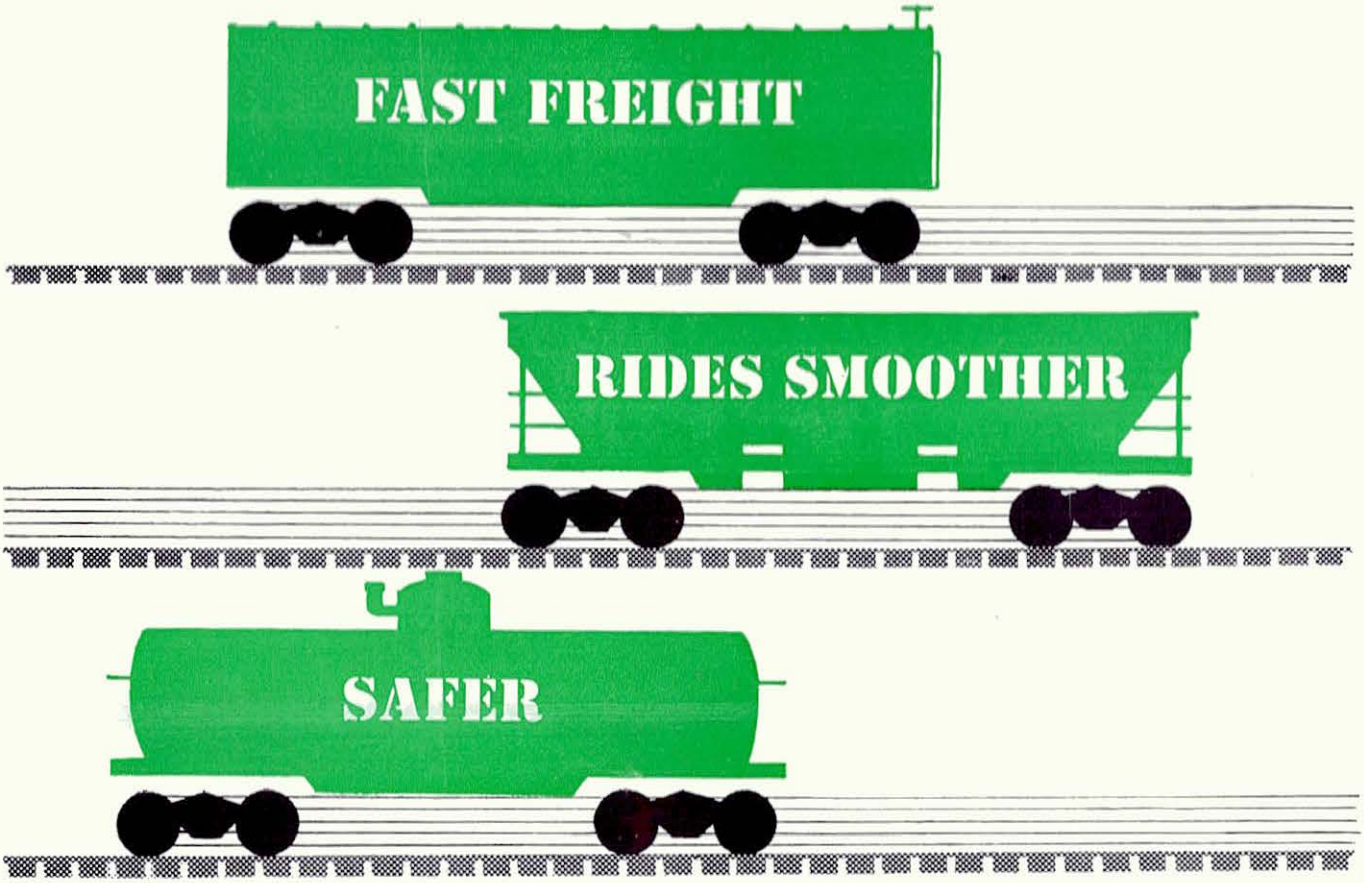


IN CANADA Alco GE IS MLW GE

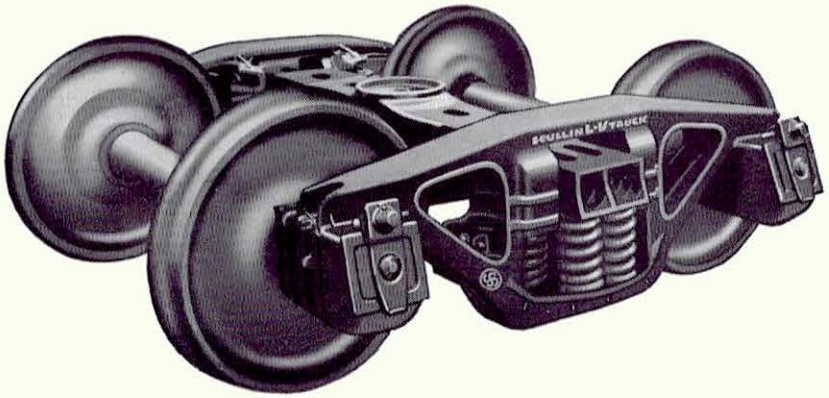
and GENERAL ELECTRIC

113-224

regular road service is delivering
more evidence every day.....



on the **SCULLIN** L-V **TRUCK** cushions and controls *both* lateral and vertical motion ... *without* costly maintenance!



STEEL CASTING MANUFACTURERS SINCE 1899

SCULLIN STEEL CO.
SAINT LOUIS 10, MISSOURI

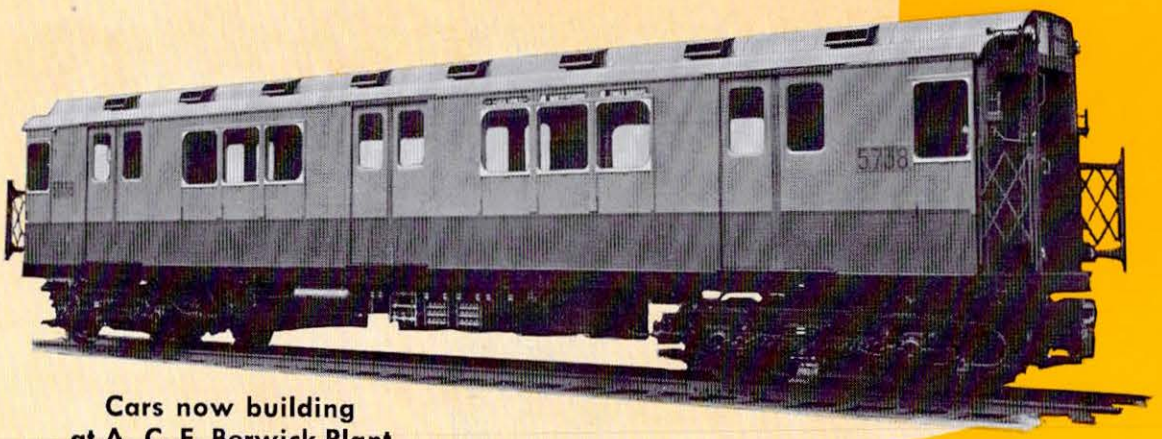
NEW YORK • CHICAGO • CLEVELAND • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D. F.

City of New York Board of Transportation

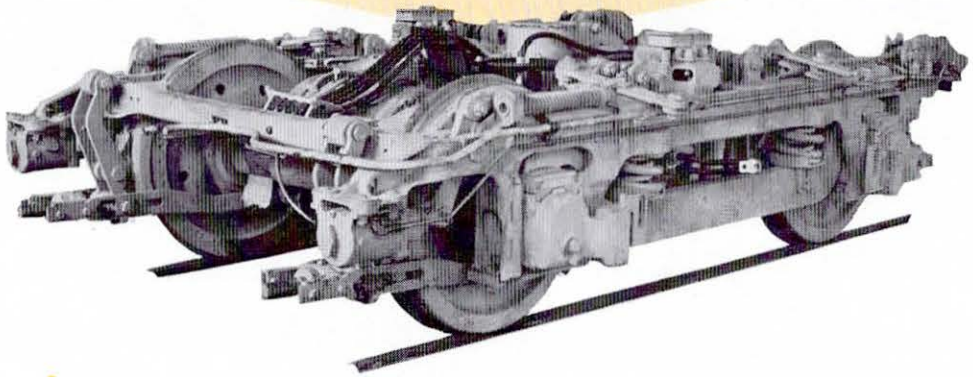
Orders

COMMONWEALTH TRUCKS

For 750 New Subway Cars



Cars now building
at A. C. F. Berwick Plant



Subway truck equipped with one-piece cast steel truck frame, bolster and spring planks.

In the interest of providing the New York public with the very best in transportation facilities, the members of the Board of Transportation of the City of New York have selected for their new cars trucks which incorporate the proven COMMONWEALTH principles of truck design.

These trucks feature COMMONWEALTH one-piece alloy cast steel truck frames, bolsters and spring planks. They are of the equalized type, with swing bolsters, all-coil springing, and unit clasp brakes.

This design provides great strength with minimum weight and low maintenance costs and assures smooth, safe riding at all speeds under the severe subway operating conditions.

The advantages of COMMONWEALTH TRUCKS have been proven through many years of operation on the leading railroads of the world.

GENERAL STEEL CASTINGS

Granite City, Ill. • Eddystone, Pa.

HARRISON COOLING

Helps Keep 'Em Available!

The majority of the Diesel locomotives built today are equipped with Harrison radiators and oil coolers.

Thus, effective jacket water cooling and the maintenance of oil temperatures within the required range are assured.

Harrison cooling helps minimize the number and the cost of overhauls . . . it is a strong factor in cutting the *roundhouse* time and raising the *availability* time of Diesel locomotives.

HARRISON

RADIATORS • OIL COOLERS FOR DIESELS

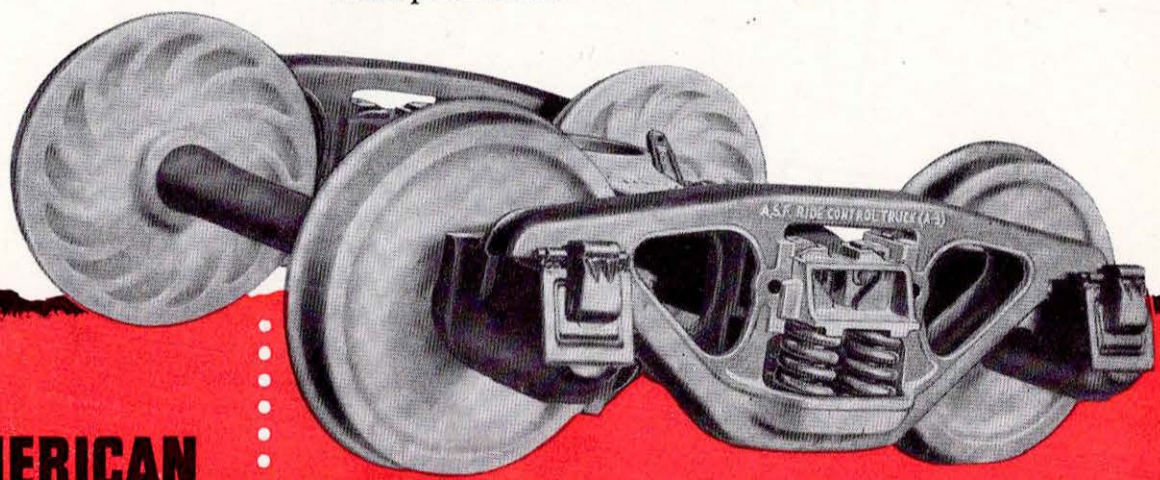
HARRISON RADIATOR DIVISION OF **GENERAL MOTORS CORPORATION, LOCKPORT, N. Y.**

Here's the Story

. . . YEAR BY YEAR

1943	**5 USERS**	**2,567 CAR SETS**
1944	**19 USERS**	**7,818 CAR SETS**
1945	**48 USERS**	**17,939 CAR SETS**
1946	**66 USERS**	**47,029 CAR SETS**
1947	**88 USERS**	**97,296 CAR SETS**
1948	**104 USERS**	**140,239 CAR SETS**

OF the 140,239 car-set total at the end of 1948, 130,637 car sets (93%) were bought by buyers who re-ordered. Repeat orders *tell the story* of Ride-Control Truck performance!

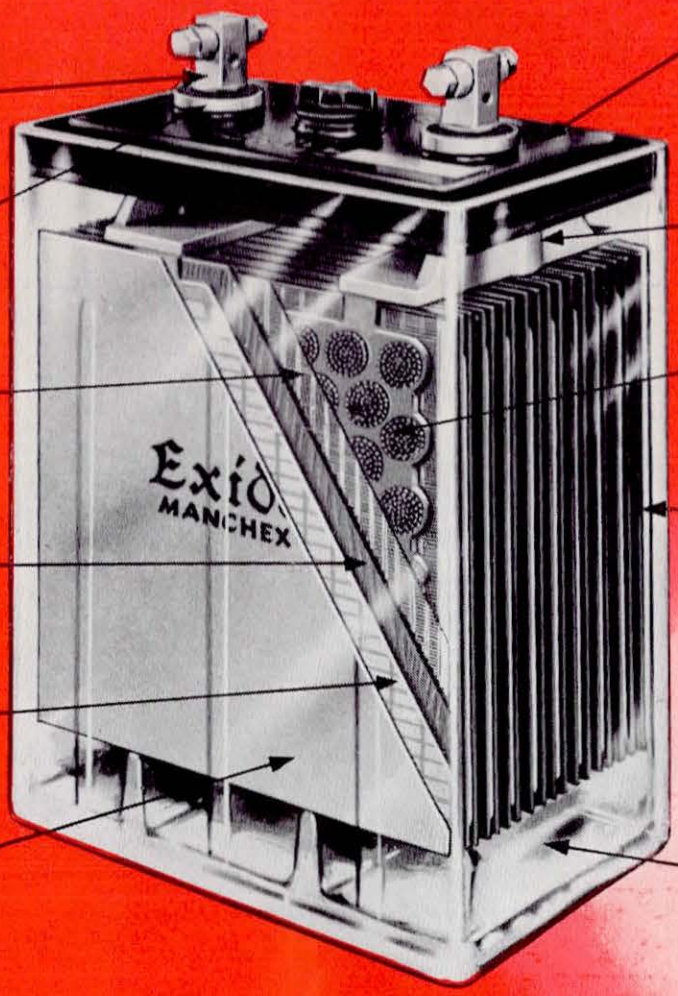


AMERICAN STEEL FOUNDRIES

MINT MARK OF ⬡ FINE CAST STEEL

The Smooth-Rolling A-S-F *Ride-Control* TRUCK Protects Roadbed, Car, and Contents

NEW...



HEAVY TERMINAL POST WITH COPPER INSERT FOR EXTRA CONDUCTIVITY

EXIDE POST COVER ASSEMBLY PROVIDES PERFECT AND LASTING SEAL

SLOTTED PLASTIC SEPARATOR, IMPERVIOUS TO CHEMICAL AND ELECTRICAL REACTION

SELECTED, FINE GRAIN, SPECIALLY TREATED GROOVED WOOD SEPARATOR

HEAVY *PERMANIZED* NEGATIVE PLATE DESIGNED FOR BALANCED PLATE LIFE

PLASTIC SPACER MAINTAINS PERFECT PLATE ALIGNMENT

HEAVY DEEP SEAL RUBBER COVER

HEAVY STRAP ASSURES MAXIMUM CONDUCTIVITY

FAMOUS EXIDE MANCHESTER POSITIVE PLATE IN SERVICE OVER 50 YEARS

THE LATEST DEVELOPMENT IN THE ART OF MAKING MOLDED GLASS JARS

AMPLE SEDIMENT SPACE

LONG LIFE

LOW MAINTENANCE COST

IMPROVED ELECTRICAL CHARACTERISTICS

INCREASED POWER (WATT) OUTPUT PER UNIT OF SPACE

LESS WEIGHT PER AMPERE HOUR OUTPUT

ATTRACTIVE BATTERY INSTALLATION

the EXIDE-MANCHEX battery

Technical data about this Exide development

Ten years in the making, the advent of the Exide-Manchex Battery is based on two things —the desire to use materials to greater advantage and provide a battery that would be more efficient with greater life.

After years of research and rigorous testing, the following combination of major items that make up a storage battery was selected for use in the new Exide-Manchex.

THE MANCHESTER POSITIVE PLATES of unique lead button construction. The buttons . . . rolled strips of corrugated soft lead . . . are pressed into holes of the lead-antimony grid. Forming action expands the buttons and locks them securely in place. Only a comparatively small portion of the total lead in the button is formed initially into active material . . . the balance is available for gradual conversion in service. This button construction is an exclusive Exide feature which results in unusually long life.

THE PERMANIZED® NEGATIVE PLATES—constructed of a lead-antimony grid . . . or framework . . . with a series of vertical ribs connected by short horizontal bars. Bars are flush with plate surface . . . extend only part way through the plate . . . are staggered on opposite sides. The active material . . . sponge lead . . . is formed of vertical strips or ribbons that extend from top to bottom of the plate between the vertical ribs and is locked in place by the horizontal bars. A type that has proved its merits in every kind of stationary service . . . developed to match the long life of the manchester positive plate.

SEPARATORS—Selected fine grain, knot-free wood separators, specially treated . . . teamed with low resistance slotted plastic separators . . . assure excellent high discharge characteristics under all operating conditions.

TERMINAL POST ASSEMBLY—The design effectively seals the opening through the covers—preventing electrolyte seepage . . . heavy strap and post castings with copper inserts in the larger sizes provide low resistance electrical path from plates to terminal.

COVER—deep seal covers of tough rubber designed to give trouble-free service.

MOLDED GLASS JAR—exclusive with Exide—the most modern in the battery industry . . . strong, uniform in dimension . . . clear glass for easy inspection and maintenance . . . straight-sided for compact assembly, neat appearance.

Where to use the new Exide-Manchex Battery

The new Exide-Manchex Battery is ideally suited for railway signal power requirements, signal lights and semaphores, interlocking plants, highway crossing lights, switch lights and electrically operated switches, C.T.C., track circuits, telegraph and telephone, and other storage battery tasks. The new Exide-Manchex Battery will provide up to 100% more capacity in the same given space.

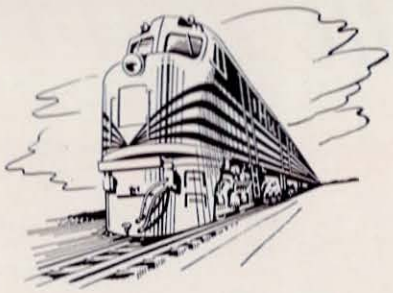
Exide®
BATTERIES

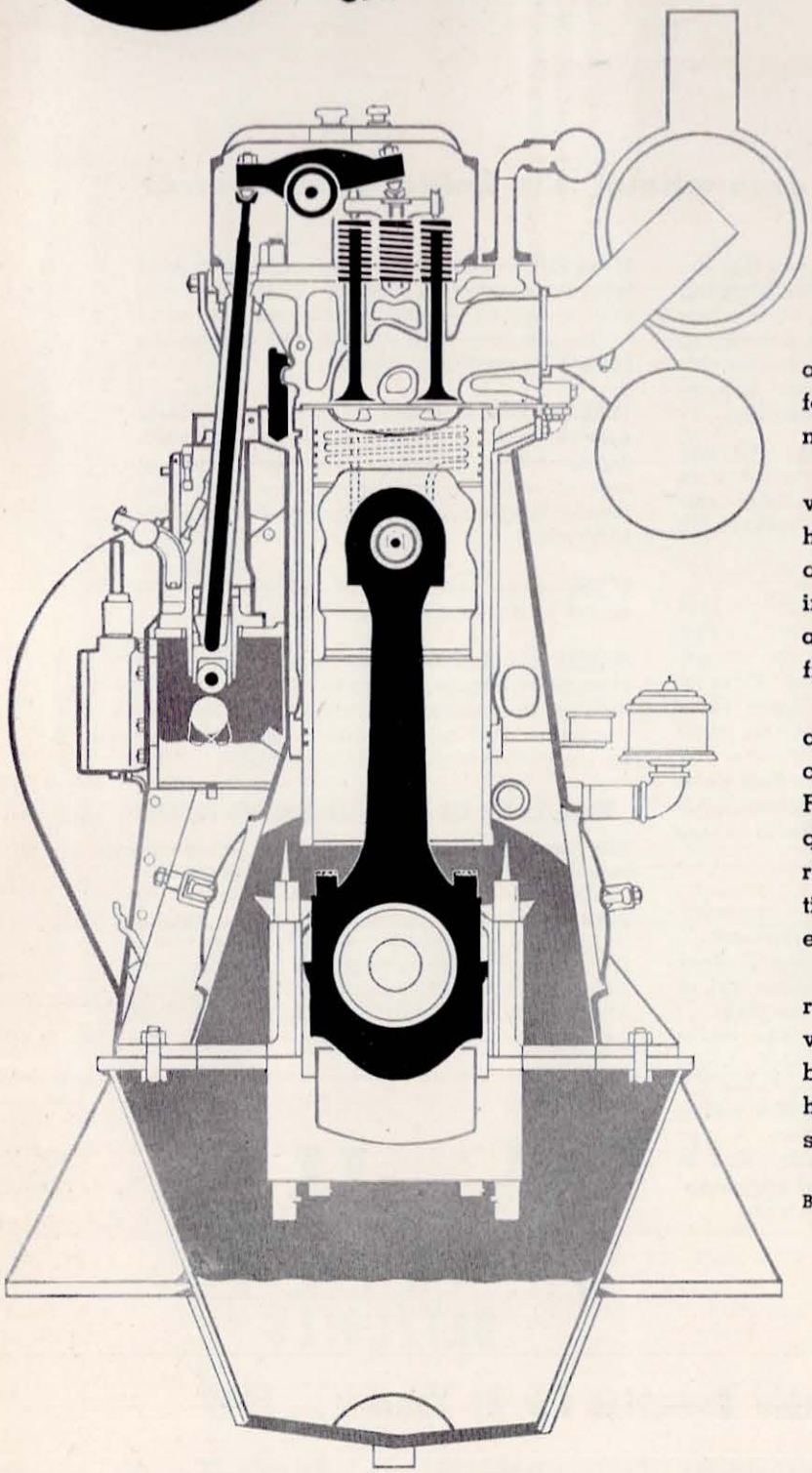
1888 . . . Dependable Batteries for 61 Years . . . 1949

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 32

Exide Batteries of Canada, Limited, Toronto

inside story of diesel dependability





The diesel engine parts emphasized in the cutaway drawing are usually made from alloy steels. They are the rods, pins, bolts, springs, rockers, and valves that are largely responsible for the dependability and efficiency of modern diesel locomotive power.

In many of these parts alloy steel provides the added strength to take the higher stresses encountered in this type of engine. In other parts it furnishes the increased resistance to corrosion, to heat, and to wear, needed for long, trouble-free operation.

Bethlehem produces the high-grade alloy steels used for diesel parts by many of the nation's leading engine builders. From start to finish, the uniformity and quality of Bethlehem alloy steels are rigidly controlled. Every known precaution is taken to see that they meet the exacting requirements of the industry.

In addition to manufacturing the full range of AISI steels Bethlehem also provides metallurgical assistance to diesel builders. Our metallurgists are glad to help with any problems concerning analysis, heat-treatment, forging or machining.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

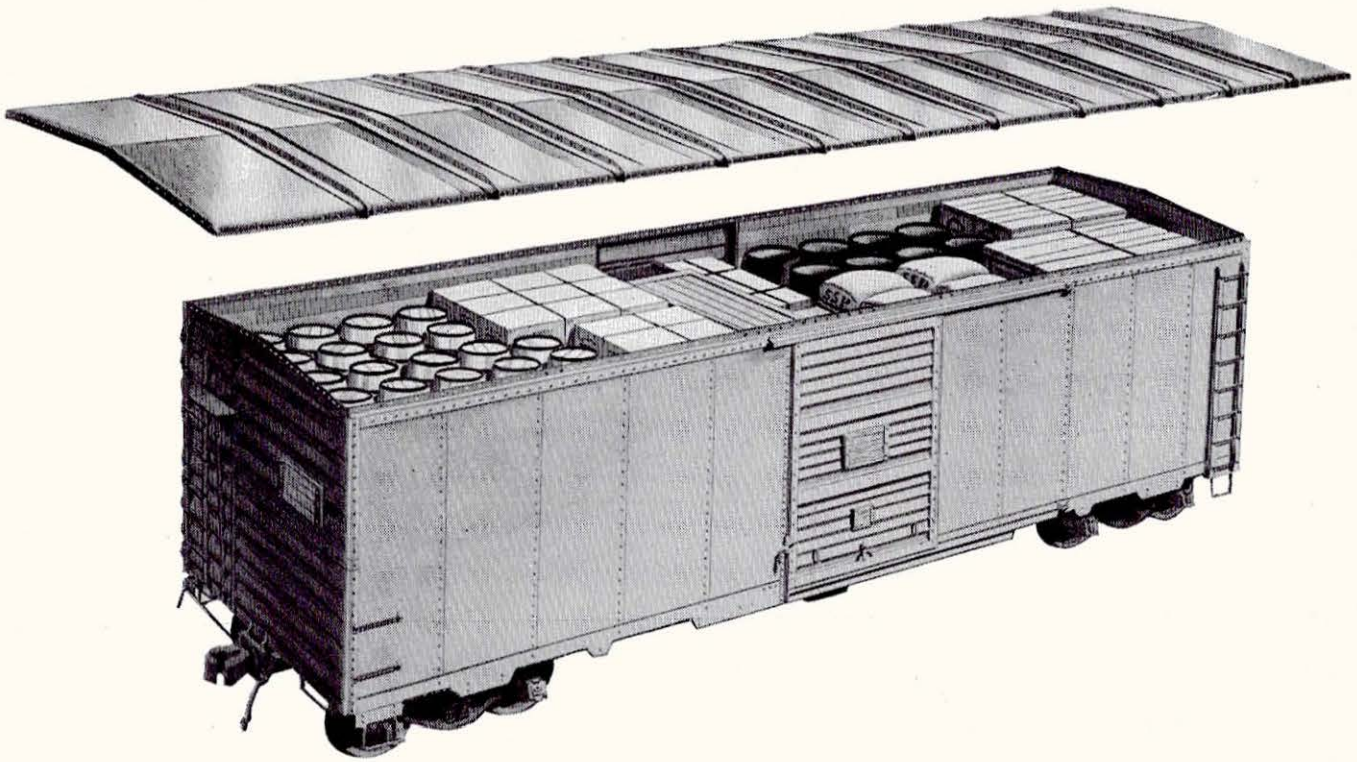
On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation

Export Distributor: Bethlehem Steel Export Corporation

BETHLEHEM STEEL

BETHLEHEM ALLOY STEELS

This weatherproof car roof is made of a durable special-purpose steel



Atmospheric corrosion can send car maintenance costs soaring. When it results in spoiled goods, expenses go still higher.

These are two good reasons why you'll want to consider using ARMCO ZINCGRIP Steel for your freight car roofs, doors, side panels and other parts. This special zinc-coated sheet steel assures ***15 to 45% greater resistance to atmospheric corrosion*** than regular galvanized coatings. It provides long-lasting protection for vital car parts and valuable freight.

ARMCO ZINCGRIP is readily drawn and formed into the most intricate parts. The special zinc coating clings tight to the steel base, leaves no bare seams or edges to invite rust attack.

ZINCGRIP is supplied with a mill-Bonderized finish known as ARMCO PAINTGRIP, which takes and preserves paint without costly and zinc-destroying pretreatment. This neutral film insulates the paint from the zinc, keeps it from drying out and peeling or flaking before its time.

You may not be able to get all the ARMCO ZINCGRIP-PAINTGRIP you could use, but we're bending every effort to catch up with demand.

For complete information on this special-purpose steel, write Armco Steel Corporation, 7 Curtis Street, Middletown, Ohio. Export: The Armco International Corporation.

ARMCO ZINCGRIP—PAINTGRIP

ARMCO

M. & ST. L.

Modern & STreamLined

FREIGHT SERVICE

For 77 years, M. & St. L. has been the nickname of the Minneapolis & St. Louis Railway, an important road which networks rich agricultural and industrial areas of the Great Midwest.

Today, M. & St. L. symbolizes also the Modern and Stream-Lined transportation which that railroad provides in Minnesota, South Dakota, Iowa and Illinois—

For Agriculture and Industry
For Shippers and Receivers of Freight
For Connecting Lines, via Major Traffic Gateways

With fleets of Diesel locomotives, newest of which is the No. 348 in the picture, and of new freight cars, the M. & St. L. is truly a road of Modern and Stream-Lined Service.

The Minneapolis & St. Louis Railway

TRAFFIC OFFICES IN 36 KEY CITIES

NAILABLE STEEL FLOORING*

Keeps Gondolas Off the Rip Tracks— Out of the Shops

NAILABLE STEEL FLOORING helps keep gondolas off the Bad Order Report, saves you money in floor repair and replacement costs. Check these points that show *why* NAILABLE STEEL FLOORING cuts floor maintenance costs and keeps cars where they belong—on the line, bringing in revenue.

Greater Strength—Channel design gives NAILABLE STEEL FLOORING higher strength, more resistance to dishing than steel plate floors. After months of grinding impacts from magnets, hot pig iron and the clamshell shown, the NAILABLE STEEL FLOOR in a test car retained its over-all flatness and nailability, its suitability for blocked and skidded loads.

No Nail Damage—Nails can't rip or splinter NAILABLE STEEL FLOORING, can't damage it in *any* way. Held tighter than in wood, the proper size nails (20d or 30d in gondolas) are easily driven into the nailing grooves and can be readily removed.

High Rust Resistance—NAILABLE STEEL FLOORING is safer from rust because it's made from N-A-X HIGH-TENSILE steel which has three to five times the corrosion resistance of plain carbon steel and more than twice that of copper-bearing steel.

Combining nailability and strength, NAILABLE STEEL FLOORING does the job of both wood and conventional steel plate floors—and does each of them better. It saves money in operating as well as maintenance costs. When your next new car or rebuilding program comes up specify NAILABLE STEEL FLOORING.

NO TORN UP PLATES. This photograph shows gondola service at its roughest. Big clamshells like this ten-ton giant often tear rivet heads out of steel plate floors and rip up the cover plates. NAILABLE STEEL FLOORING *cannot* be torn up because it has no projecting rivet heads, no plate edges.

*PATENTS PENDING

NAILABLE STEEL FLOORING

A GREAT LAKES STEEL PRODUCT

GREAT LAKES STEEL CORPORATION

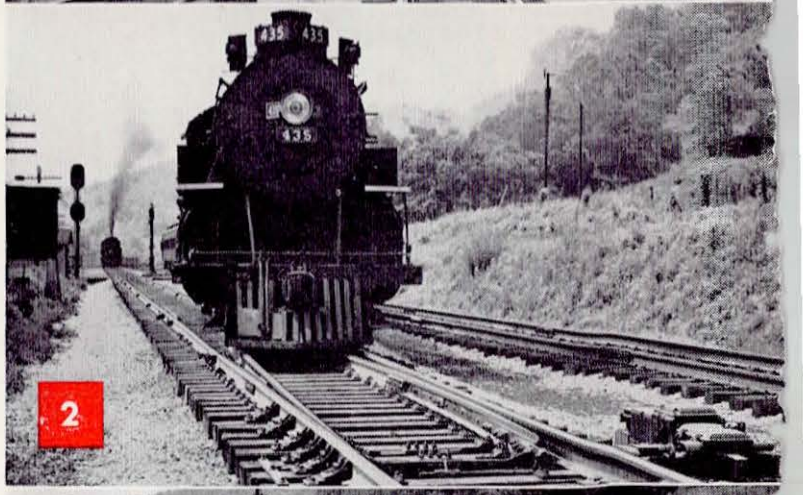
STEEL FLOOR DIVISION • PENOBSCOT BUILDING • DETROIT 26, MICHIGAN

UNIT OF NATIONAL STEEL CORPORATION

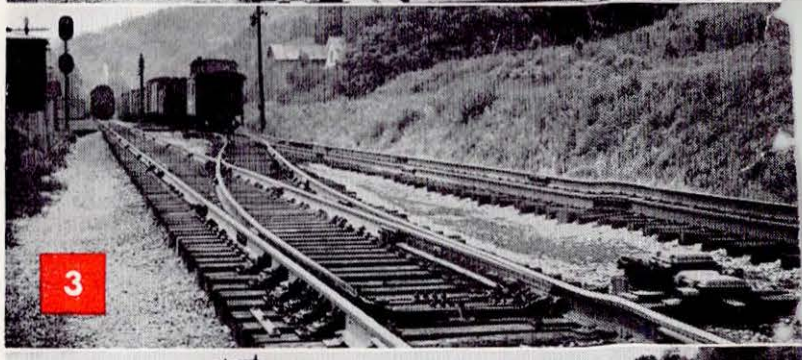
This is EASY with "UNION" C.T.C.

These action pictures clearly illustrate how closely meets and passes can be coordinated when train movements are directed by signal indication and switches are power operated. Results? Fewer stops . . . time saved . . . efficiency increased . . . less wear and tear on equipment . . . lowered operating costs.

1. Extra 2722 west with solid train of loaded hoppers advances ahead of passenger No. 37 into double track territory.

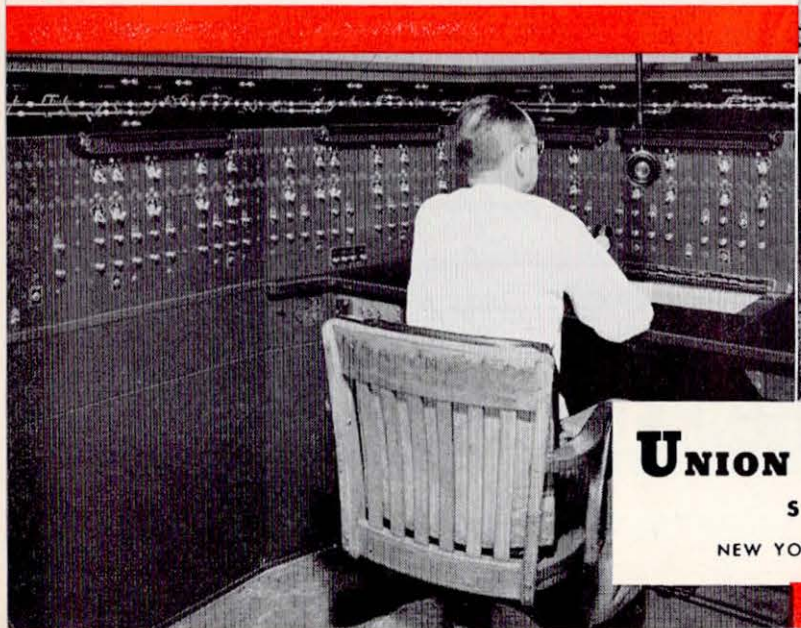


2. No. 37 runs around Extra 2722 on eastbound track without stopping...returns to westbound track through power-operated crossover.



3. Switches returned to normal...signals cleared... manifest freight No. 92 east highballs through without stopping.

4. After taking water, and with No. 37 and No. 92 out of the way, Extra 2722 proceeds with minimum delay.



UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

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Keeps Gondolas Off the Rip Tracks— Out of the Shops

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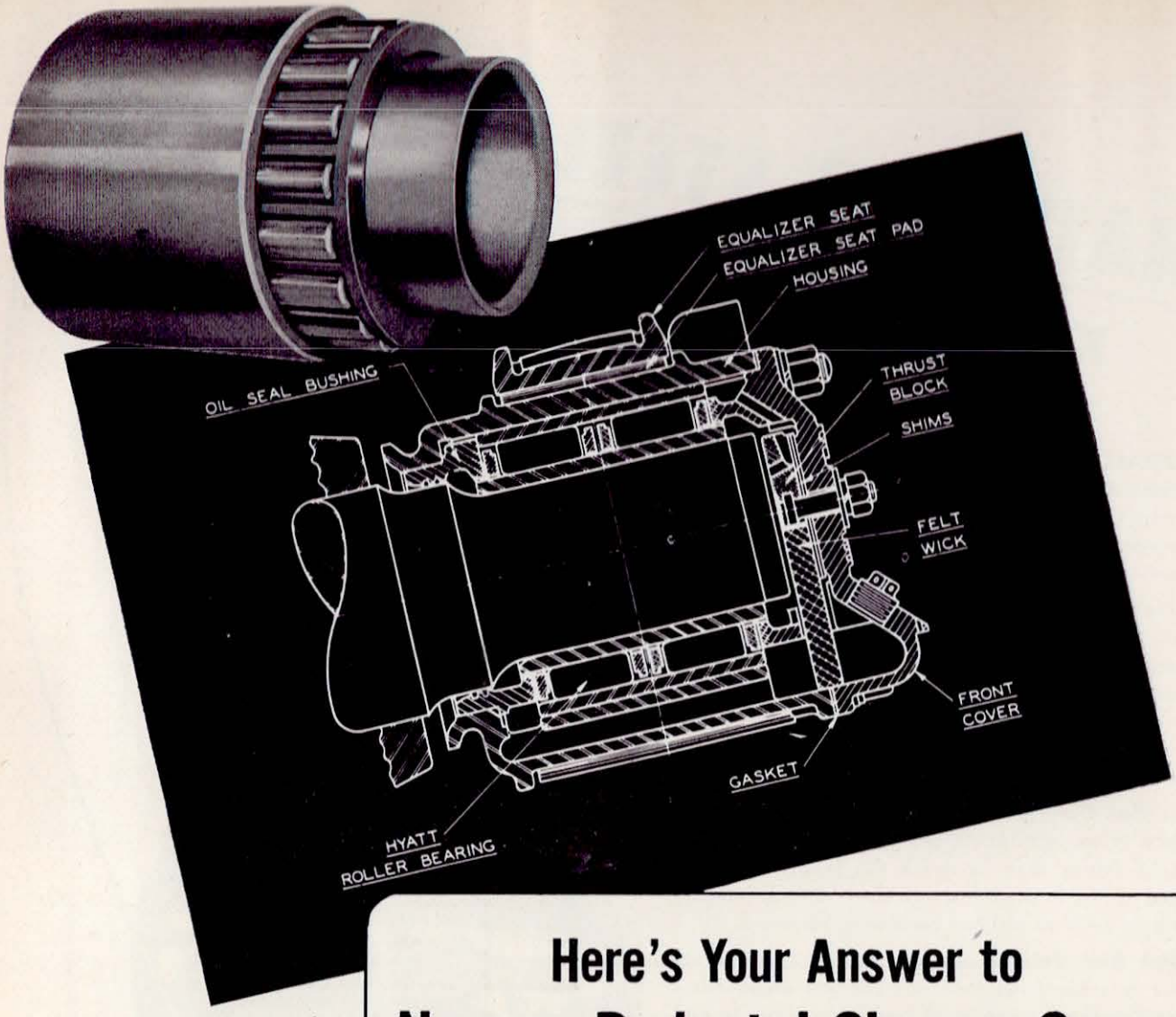

Here's Your Answer to Narrow Pedestal Change Overs

Hyatt type "D" and "E" roller bearing journal boxes are designed for installation in standard AAR narrow pedestal openings.

If you are planning to install roller bearing journal boxes under existing plain bearing cars, consider carefully the advantages of using Hyatt journal boxes.

1. Hyatt railroad bearings are of the preferred straight radial type and offer capacity well in excess of requirements.

2. All parts of Hyatt bearings and boxes are easily accessible for cleaning and inspection with a minimum of shop expense.

3. Hyatt Journal Boxes are removed from car axles as a unit, without disturbing any bolts or press fits of inner race.

4. Hyatt boxes of the same size and style are freely interchangeable from journal to journal.

5. Inventories of spares can be reduced when Hyatt Roller Bearing Journal Boxes are used.

6. General maintenance is simplified and can be taken care of by regular shop forces.

Write to Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey for further information on "D" and "E" Journal Boxes.

HYATT ROLLER BEARING JOURNAL BOXES

Vol. 126, No. 4 January 22, 1949

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office.

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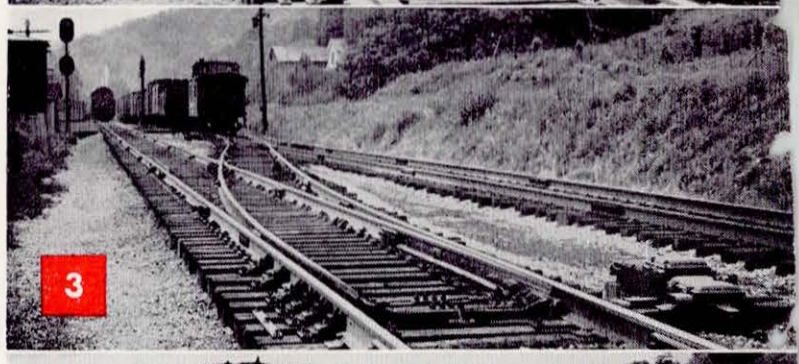
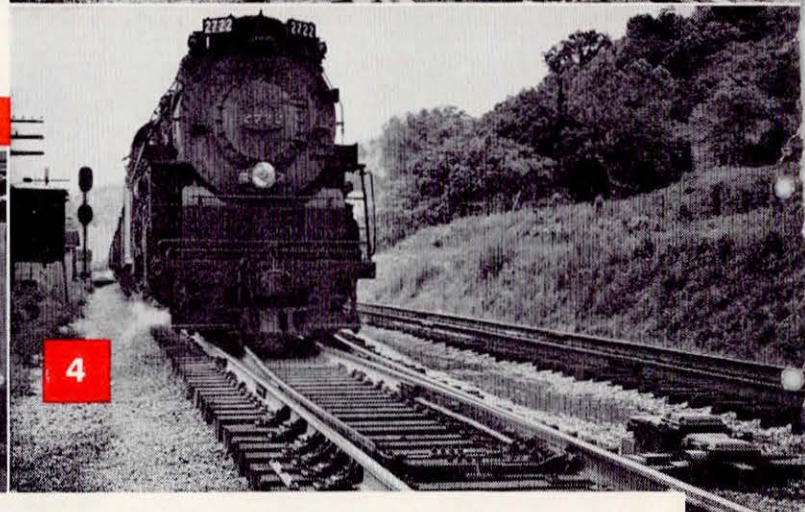
1. Extra 2722 west with solid train of loaded hoppers advances ahead of passenger No. 37 into double track territory.

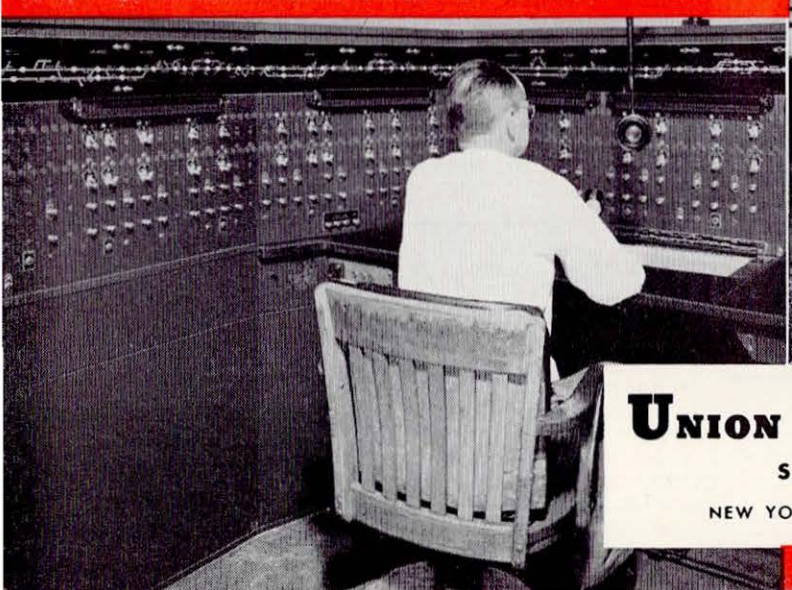
2. No. 37 runs around Extra 2722 on eastbound track without stopping...returns to westbound track through power-operated crossover.



3. Switches returned to normal...signals cleared... manifest freight No. 92 east highballs through without stopping.



4. After taking water, and with No. 37 and No. 92 out of the way, Extra 2722 proceeds with minimum delay.



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WEEK AT A GLANCE

VARYING DEPRECIATION CHARGES: A powerful case for accruing depreciation charges on the basis of actual replacement costs rather than on original costs is contained in an article beginning on page 32, adapted from a paper presented to the St. Louis chapter of the Controllers Institute by Arthur K. Atkinson, president of the Wabash. Mr. Atkinson finds that natural dislike for change is the only reason for sticking to the original cost method, when the replacement cost method offers so many potential advantages, from the standpoints of taxes, labor and public relations and preservation of capital.

"FULLY DRUNK; FULL PAY": That fireman whose dangerously intoxicated condition was the subject of our editorial by the above title, last fall, is *not* going back to work for the Atlanta & West Point. Our News columns tell what we hope is the final chapter in his story.

"REAWAKEN" TO RESPONSIBILITIES: In an unusually forceful report, reviewed on page 28, the National Mediation Board warns that railroads and railroad labor unions alike "must reawaken to their responsibilities" if they wish to avoid "compulsory procedures for dealing with railway labor disputes."

$10,000 A YEAR: Fuel savings on a single Diesel locomotive operated by the Southland Paper Mills approach $10,000 a year. Page 35.

REBUILDING THE ALASKA: Evidence that one department of the government, at least, has full faith in the continuing paramount importance of rail transportation for both normal peacetime and possible wartime traffic is provided by the Interior Department's $48,000,000, five-year program for complete rehabilitation of the strategic Alaska Railroad. The program, which is now in its third year, and is designed to make the railroad a first-class transportation system, is described in an illustrated article beginning on page 24.

NEW USE FOR OLD DINER: A short illustrated article on pages 30 and 31 tells how the Chicago & North Western found a new use for an old dining car by converting it into a special wrecking crew car which promises a new standard of comfort for men engaged in wreck clearance.

DIESEL FREIGHT WORK: The latest "Monthly Comment" of the Interstate Commerce Commission's Bureau of Transport Economics and Statistics, which is summarized on page 39, covers, as usual, a variety of subjects. Among them is a detailed analysis of the proportions of freight-service gross ton-miles handled by Diesel and steam locomotives on 36 of the country's largest railroads, which should make interesting reading for both mechanical and operating officers. Other articles in the "Comment" deal with the working capital position of Class I roads; with the prospective yield from the recent Ex Parte 168 interim freight-rate increase; and with directional traffic shifts.

PALLETIZED FREIGHT: It seems to be pretty generally agreed that pallets offer advantageous means of handling certain types of freight. The only trouble is that no one has yet been able to produce a satisfactory answer to the perplexing and many-sided question of how to handle the pallets. That topic was a major subject of discussion at last week's Materials Handling Exposition in Philadephia; among those participating in the discussion—which is reported on page 36—were Fred Carpi, traffic vice-president of the Pennsylvania, and J. W. Milliken, purchases and stores editor of *Railway Age*. Incidentally, railroad men and others attending the exposition saw a five-million-dollar display of all types of materials handling equipment.

HOW MUCH CAPITAL: This week's leading editorial discusses some implications of the annual report—summarized last week—of the President's Council of Economic Advisers, in which it was stated that railroad capital expenditures should average about $1 1/3 billion annually for some years to come. The question raised by our editorial is not the accuracy of the estimate—but where to get the money. The estimate does, however, put the railroads "on the spot"—failure to go along with it might be used as an argument for future socialization. And they can get off that spot only by doing their best to obtain revision of those political policies which make it difficult or impossible for them to get the money that going along with the estimate will require.

WHERE TO GET IT?: William T. Faricy, president of the Association of American Railroads, raised much the same question posed in our editorial when he told the Atlantic States Shippers Advisory Board at New York on January 13 that: "There are caution signals ahead as to whether we can count on finding that increased investment. Railroad investment . . . depends upon the prospect of earning reasonable profits." His address is reported in the News columns.

"CONSISTENCY, THOU ART A JEWEL!": And the government is mighty short on jewels. For while his economic advisers call on the railroads to make capital expenditures of about $1 1/3 billion a year—out of their own pockets, of course—the President himself is proposing to dump an approximately equal amount of the public's money into socialized transport facilities—water, highway and air. Some of his ideas were reported in our News pages last week; others this week.

Why we say: "None better!"

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HOW MUCH CAPITAL INVESTMENT DO THE RAILROADS NEED?

The President's Council of Economic Advisers, in its recent annual report—summarized on page 44 of our last week's issue—estimates that railway expenditures for capital improvements should, for a period of years, average from $1.3 billion to $1.4 billion (at 1947 prices) annually—or about one-sixth more than in 1948, which was the highest year for capital outlays in the railroads' history. The Council's estimate is predicated upon a continued diversion of both freight and passenger traffic away from the railroads to rival transportation agencies: If this diversion should cease, as there is every good reason to suppose it will unless the nation is bereft of all economic sense, then the necessary capital expenditures by the railroads should, of course, be correspondingly increased.

There are not many railroad men who will dissent from the Council's estimate of the railroads' needs for new capital, unless to propose a larger one. As so forcefully emphasized, however, by William T. Faricy, president of the Association of American Railroads, in his recent address (reported in this week's news pages) to the Atlantic States Shippers Advisory Board, there are still fewer railroad men who would be able to predict, as matters now stand, where all the money to finance such a sustained improvement program is going to come from. Railroad net earnings in 1948 were less than $1 billion, and carloadings in 1949 are not off to a particularly brilliant start.

The railroads cannot afford—for political reasons if for no other—to ignore this official estimate of their capital requirements, coming as it does from the very midst of the White House circle. If they should pay little or no heed to it, and some crisis before long should occasion a conspicuous deficiency in the quantity or quality of railway service, there would undoubtedly arise a loud clamor from the Left that the railroads had "fallen down" because of "managerial incompetence." It will be recalled that some attempt was made to raise such a hue and cry as this early in World War II—but the effort fell flat because, in the decade before the war, New Dealish critics had more often assailed the railroads for retaining too much capacity than for providing too little. These gentry have, evidently, learned their lesson and are not going to make that mistake again.

Formula for Governmental Invasion

It seems more than likely that the railroads are now having applied to them the same formula that is being used to justify governmental invasion of other businesses—that is, an official "expert" opinion is issued announcing that greatly enlarged capital investment is needed, to be followed later by a demand that government do the investing since private capital is unwilling or unable to do so. Meantime, government pursues policies calculated

in every way possible to discourage private investment. This is the socialist strategy being applied, notably, to housing, to steel, and to electric power.

The railroads cannot attack the official estimate of their need for additional investment as unreasonably large—because it isn't. Supposing they attempt to carry out the program, what are they going to use for money—and, even in the case of companies having access to sufficient investment funds, why should management keep pouring investors' money into services for which politics persistently refuses reasonable compensation?

Getting "Off the Spot"

The railroads have been put "on the spot," but they can quite likely extricate themselves—by publicly accepting the official estimate of the capital expenditures they need to make, and then *specifying the steps that government must take, and why, to enable the railroads to finance expenditures at this high level.* If this is done, and done well, the railroads will get themselves "off the spot" and, instead, put on the spot the policies and people who are standing between them and their desire to provide continually improved service. What the railroads need to restore their earnings and investors' confidence in their future is a great deal more than, merely, higher rates more speedily granted—which is the oversimplified answer often given to this riddle. In addition to that innovation, at least three other fundamental changes in public policy are needed:

(1) Establishing as accepted practice the financing of publicly owned long-haul transportation plant (e.g., superhighways and inland waterways) by tolls instead of by political appropriations which bear no relationship to users' payments—and prescription of some dependable limitation on maximum siezs and weights of commercial motor vehicles. For people to put their money into privately owned transport plant, with no settlement of the foregoing issues, bears more resemblance to gambling than to investment.

(2) Securing general recognition of the predominant public interest in maintaining a thriving nation-wide *common carrier service*—which no carriers except the railroads actually offer—and consequent easing of the regulatory restrictions which cause the railroads to lose so much of their remunerative traffic to private and contract carriers, thereby increasing the unit cost of their common carrier service. It would not be "unreasonable discrimination" for a common carrier to charge higher rates to a shipper who discriminates against the common carrier by giving all his desirable traffic to rival agencies of transportation or who hauls all the profitable traffic in his own trucks or barges.

(3) Putting the burden of proof on the advocates of all legislative or regulatory orders which make railroad service more costly, or which force the carriers to burden their profitable traffic with the cost of maintaining services which are hopelessly unremunerative.

The railroads are not going to get these concessions which are so necessary to their health—and to the public interest in the preservation of a thriving and progressive common carrier service—merely by quietly requesting them. They will have to show everybody why, and not in bland and uncontroversial statements of abstract principle, but concretely and dramatically. Moreover, nothing is more necessary than that they demonstrate that they are doing their very best with what they have, because only by making that point emphatically clear can the public be convinced that there is any necessary connection between railroad prosperity and superior service. People are not interested in railroad prosperity *per se*, but only to the extent that they understand that railroad prosperity is going to be of direct benefit to *them*.

As usual, much is to be learned from observing what has happened in Britain—which customarily obliges by providing a preview of performances billed for later showing on this side of the Atlantic. The first industries to be nationalized over there—coal and transport—were those repetitively accused of inadequate modernization, too small an inflow of new capital. The British railways politely requested a "square deal" from the Britisn public—what they got was government seizure, which also embraced their competitors. The victorious Socialists made no Quixotic appeal to the public's chivalry, but to its selfishness.

THE WELDED STAYBOLT

It has been repeatedly pointed out in these columns that—although the Diesel-electric locomotive is currently in the spotlight, and its operation and maintenance frequently receive the lion's share of railroad men's thinking as well as of funds available for servicing improvements—the major portion of freight, passenger and switching work is still performed by steam locomotives. Consequently, proposals calculated to improve the operation and maintenance of steam power merit considerable attention on the part of both railway mechanical departments and top management.

The welded staybolt shows promise both of improving performance and economizing maintenance and is the next logical step beyond seal welding. Over two years ago tests were completed by a special A.S.M.E. committee which resulted in the acceptance of the fusion-welded staybolt in lieu of the threaded bolt for power boilers. More recently, and perhaps of greater importance because of closer relationship to the locomotive staybolt problem, joint tests were completed by the Milwaukee Railroad and the Republic Steel Corporation on the welding of staybolts for locomotive boilers. The research project employed comparative

pulling tests between welded and threaded staybolts which showed that all of the welded types tested were as strong as, or stronger than, the conventional threaded and hammered bolts.

While the pull-out tests showed merely that the welded staybolt had greater static strength than the threaded bolt, additional advantages appear likely.

Resistance to fatigue failure should be greater because the abrupt changes in cross-section caused by threading are avoided.

Maximum stresses in the firebox plate from heating the metal will be reduced with welded bolts because the tensile stress due to weld shrinkage will counteract the compressive stress set up on the fire side of the plate. In other words, the shrinkage from welding tends to neutralize the expansion from heating. The opposite result occurs with standard staybolts, as driving the bolts exerts an expanding stress in the plate around the bolt which adds to the stress resulting from heating the plate.

Both the reduction of plate stress and the increased resistance to fatigue failure that should result from welded staybolts would increase the reliability of steam power and thereby improve its overall performance record. Because all of the welded bolts tested were as strong or stronger than the threaded and hammered bolt, elaborate designs should not be required to provide sufficient strength and safety. Perhaps the design could be simplified eventually to the form of a plain cylindrical bolt with a straight chamfer on each end to provide space for depositing sufficient weld metal without bevelling the firebox plate. This, or any other design reasonably approaching it, would greatly simplify steam locomotive maintenance and reduce its costs.

UNIONIZING ENGINEERING DEPARTMENT SUPERVISORS

In an industry as generally unionized as the railroads, the organization of another occupational classification, one road at a time, attracts little attention, but it ought to do so when the group being unionized is a branch of management. This is what is going on in the engineering department, where technical engineers, roadmasters and supervisors are being gradually enrolled by the unions. As a matter of actual practice, the primary function of a union is protecting the interests of the "average" or below-average employee—the employee of superior attainments is usually able to do a pretty good job of looking after himself. If unionization is extended to the lower stratum of management, promoting or strengthening the tenure of sub-standard personnel in such positions, the depressing effect on over-all efficiency is bound to be serious; and the innovation will certainly do nothing to advance the progress of able and ambitious men. It will not make railroad work attractive to new recruits with anything beyond the mediocre in them.

Management probably cannot prevent unionization of supervisory forces if the men themselves are insistent upon it—but management can take steps to prevent supervisory forces from *desiring* to be unionized; and, once unionization occurs, management can and should resist to the utmost all contract provisions calculated to stifle initiative, cripple efficiency, or bar the entrance to new talent.

Over the years, few groups on the railways have demonstrated their loyalty more conclusively than roadmasters, supervisors and many engineers, whose work has often required long hours, meticulous attention to detail, and even physical hardship. In the light of present-day working conditions in industry generally, and among other groups on the railways, it is not at all to be wondered at that these men should seek to improve their conditions by unionization, if management makes it clear to them that their situation is not going to get any better while the say-so remains solely with management.

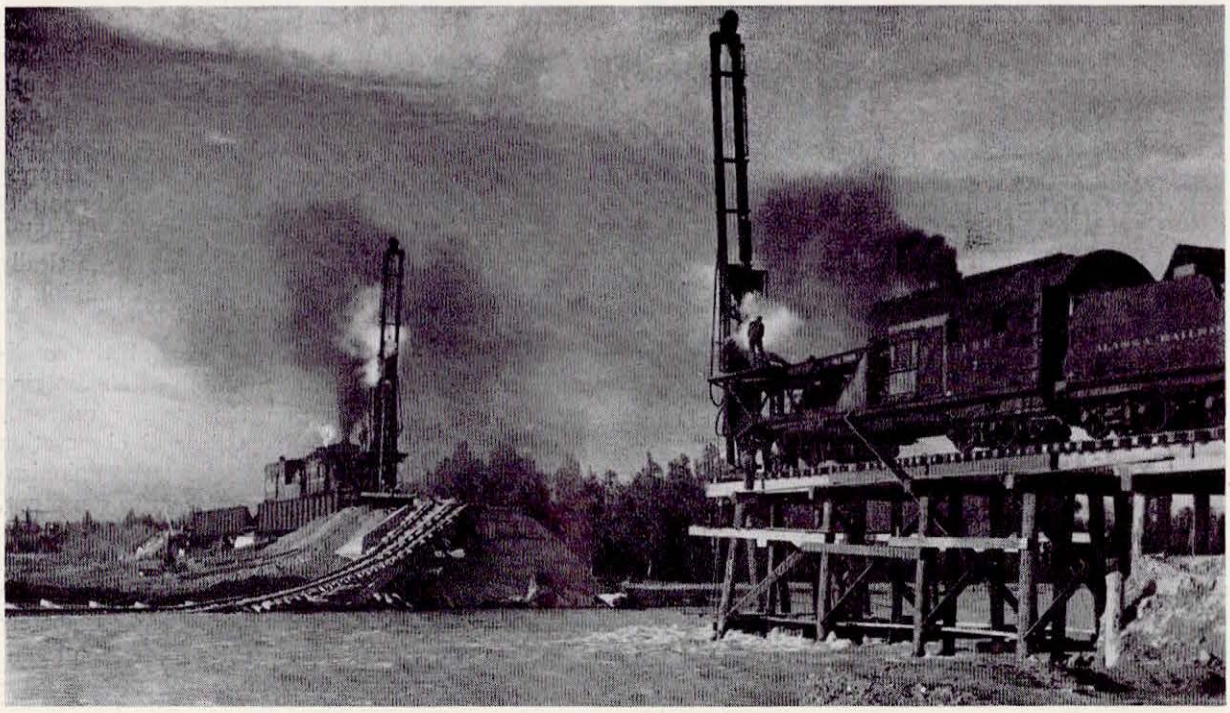
Where unionization of supervisory forces has occurred, our information is that the spirit of initiative has been largely removed from most of the personnel thus affected—and the information comes to us from the men themselves. Buried in a roster upon which there is no hope of advancement except by rigid progression, the old urge to go the extra mile gradually expires. Where supervisors undergo unionization they lose interest in those associations of kindred officers—such as the Roadmasters' and Bridge and Building Associations—which for half a century or more have stimulated their thinking and helped them increase their proficiency. With the rewards of ambition taken away, interest wanes in improved knowledge of technical subjects pertaining to engineering and maintenance. Finally, when the unions take over, the door is practically closed upon young men with technical training of academic grade.

This paper does not claim to know all the conditions which have led to unionization of engineering department supervisors on the specific railroads where it has occurred. From general observation elsewhere, however, two facts about the unionization of foremen and supervisors seem to stand out, viz.: (1) When unionization gets going on a large scale, it may spread merely by contagion—but in its incipient stages it usually has strong motivation in conditions of work or status which are acutely unsatisfactory; (2) Supervisory forces do not generally elect of their own choice to consider themselves as "rank and file"—they usually are treated as such before they begin to act that way.

In the Nenana River canyon, between McKinley Park and Healy, where the slope in the center left is being cut back to reduce a sharp reverse curve

PUSH REHABILITATION OF ALASKA RAILROAD

Uncle Sam getting set to start third year of five-year rebuilding program designed to engineer, for the first time, this 470-mi., "tough country" line near the Arctic circle



Two pile drivers replacing some temporary falsework washed out during a flash flood in the spring of 1948

Up in the twilight zone of the far North, reaching from the 60th parallel almost to the Arctic circle, the continent's most northerly railroad, once dubbed "the meanest stretch of railroad under the American flag," is forging ahead with its five-year program of rehabilitation, estimated to cost approximately $48,000,000. For the first time since taking over in 1915, the United States government is determined to make a real transportation system out of its strategic property —the Alaska Railroad—which, starting at Seward, a port at the head of Resurrection bay in the Gulf of Alaska, extends 470 mi. north over mountains and valleys to Fairbanks, in the heart of the Alaskan interior.

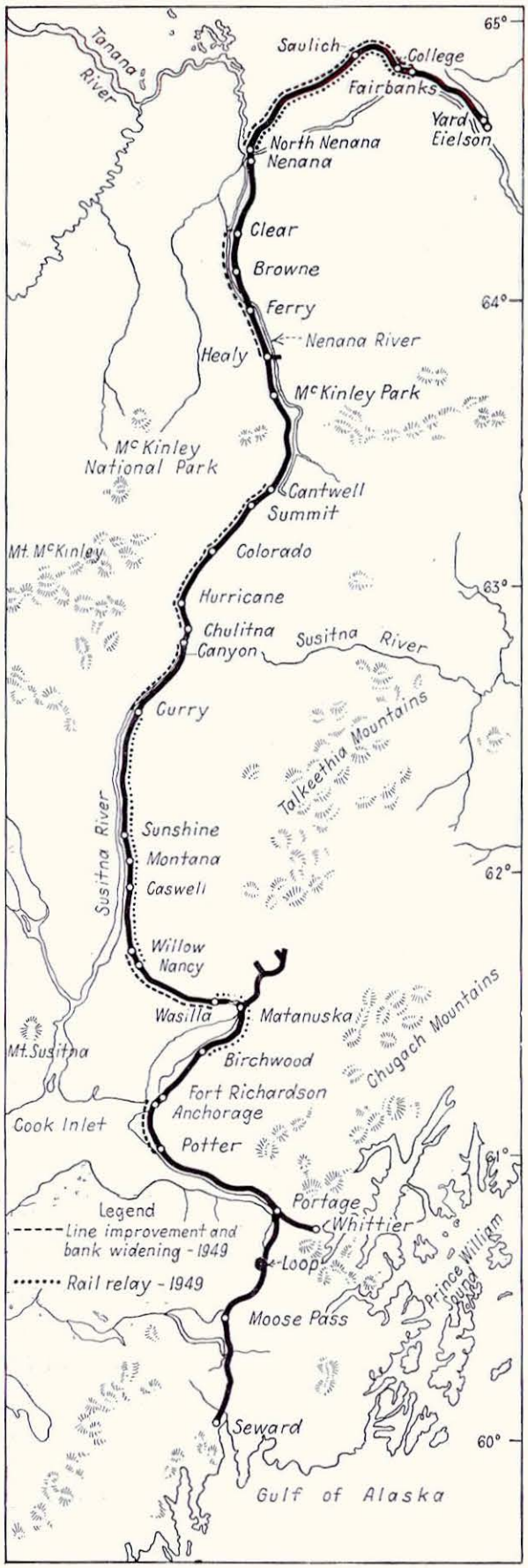
The first two years of the rehabilitation program have already seen the relaying of nearly 200 mi. of rail, heavy tie renewals, extensive bank widening, heavy curve and grade-reduction work, large-scale reballasting and surfacing, and repairs to trestles, bridges and shop buildings, as well as the placing in service of a large amount of rolling stock and at least 16 new Diesel-electric locomotives.

The 1948 program alone saw the completion of four major construction projects at Anchorage, about 114 mi. from Seward, at a combined cost of $977.000. These include yard grading and drainage ($187,000); the extension of a freighthouse ($170,000); the extension of an office building ($236,000); and the dismantling and re-erection of a forge building ($384,000). Other work included the start of a heavy equipment and Diesel repair shop at Anchorage, to cost $992,000 when completed; 70-per cent completion of a yard grading and drainage project at Fairbanks, to cost $650,000; 33-per cent completion of additional terminal facilities at Fairbanks, to cost $3,100,000; 60-per cent completion of a $4,668,000 bank-widening program; the construction of six bridges (80 per cent completed) at a cost of $450,000; and the completion of five barracks at Anchorage, at a cost of $141,000. Now the government-owned and operated Alaska is inviting contractors' proposals on its 1949 (third-year) line improvement projects, with more to come in 1950.

Never an Engineered Line

Beset from the outset by almost insurmountable obstacles and problems in the form of terrain and weather conditions, the Alaska was never a truly engineered line. Starting in 1902, the Alaska Northern Railroad Company attempted to build the line from Seward to the Matanuska coal fields, about 185 mi. to the north, but gave up in 1908 after about 70 mi. of line had been completed. In 1915 the federal government took over, and gradually pushed the line to completion—after a fashion—to Fairbanks, its present northern terminus, reaching there in 1923.

"After a fashion" is apropos to the work, because, in spite of an expenditure of approximately $75,000,000 for construction, the line was essentially a pioneer



Sketch map of the Alaska, showing by symbols the locations of the roadway work involved in the 1949 rehabilitation program

Shaping an embankment with a Jordan spreader

Surfacing with Jackson electric vibratory tampers during the 1948 ballasting program

road as to alinement and grades, used untreated local spruce mostly for ties and bridge timbers, and was laid with second-hand rail weighing 70 lb. per yd. or less.

The start of World War II found the Alaska—then suddenly of great strategic importance—about what could be expected—a physical wreck—and sparked the beginning of its rehabilitation, the work at first being done largely by an Army railroad battalion. World conditions subsequent to the war have dictated further rehabilitation of the line—on a more permanent basis—and that is what is going on at the present time, chiefly under contract.

The major roadway and track work completed in the 1948 program included the relaying of about 50 mi. of 70-lb. rail with 115-lb. rail, under a contract which includes 44 mi. of unfinished rail relay to be completed in 1949; bank widening and ballasting between Caswell and Curry, 46.2 mi., and also between Clear and Nenana, 17.5 mi.; and heavy grading for the extension of Fairbanks yard. It also included preliminary bank widening and the putting of a running surface on about 19 mi. of track between North Nenana and Fairbanks, a distance of approximately 55 mi.—which will be completed, by the contractor involved, in the 1949 working season.

Additional rail relay programmed for 1949, on which bids are now being invited, will include 45.5 mi. between Casewell and Curry, where bank widening was carried out during the past year, and about 56 mi. between a point near North Nenana, and Fairbanks, in which territory the 1949 carry-over bank widening will precede the rail-renewal work.

All of the 1949 relay will consist of the replacement of 70-lb. rail with 115-lb. rail, as well as the renewal of existing No. 9, 70-lb. turnouts with No. 11, 115-lb. turnouts. The work of the rail relay contractor will also include the construction of passing track extensions on subgrades that have already been provided in the bank-widening programs; the renewal and respacing of ties as necessary to provide 24 ties per 39-ft. panel; and the final raising of the track about 4 in. on new ballast.

The relay project between North Nenana and Fairbanks carries the highest priority of all roadway construction work to be done during 1949, as the rail for this territory has been on order since December, 1947, and deliveries are expected during the first quarter of the year. Here, under the carry-over bank-widening and general roadway work, maximum curvature will be reduced from 5 deg. to 3 deg. at 11 locations between Saulich and College—this work involving several line changes.

1949 Roadway Program

The general line improvement and bank-widening program to be undertaken in 1949, has been divided into six separate projects, numbered 1 to 6 in accordance with their importance to the over-all rehabilitation program. The most important of these projects lies between Colorado and Cantwell, 22.5 mi., within the territory where general bank widening was carried out during 1948. Here the work involves the removal of one long sag, approximately 13 ft. deep, which must be eliminated to reduce an adverse grade to northbound tonnage train.

The second location is between Curry and Canyon, 14.9 mi., along the east bank of the Susitna river. Between these two stations the river narrows considerably and there are several places where the track is hemmed in along the river by high bluffs. Grades between these two points do not exceed one per cent, but the curvature in some locations runs as high as 10 deg., which will be reduced by line changes involving extensive grading at some locations.

The line improvement and bank-widening project carrying Priority 3 lies between Chulitna and Colorado, 23.2 mi., and it is expected that this will involve some of the heaviest work in the 1949 program. Here there is one long 1.75-per cent grade, and there are several locations where the curvature reverses itself, crossing numerous streams. The track crosses Hurricane gulch on a steel arch bridge at Mile Post 284.4, this bridge being more than 800 ft. long and 292 ft. above stream level.

The fourth project in order of importance lies between Healy and Clear, a distance of 36 mi. Here the track follows the Nenana river, crossing it at

Ferry, and is in open country, except in the vicinity of Browne, where several side-hill bluffs of a minor nature are encountered. Grades are generally slight and curvature is under 6 deg.

Fifth in importance is the project between Wasilla and Willow, where part of the rail has already been relaid and where it is proposed to complete the relay in 1949.

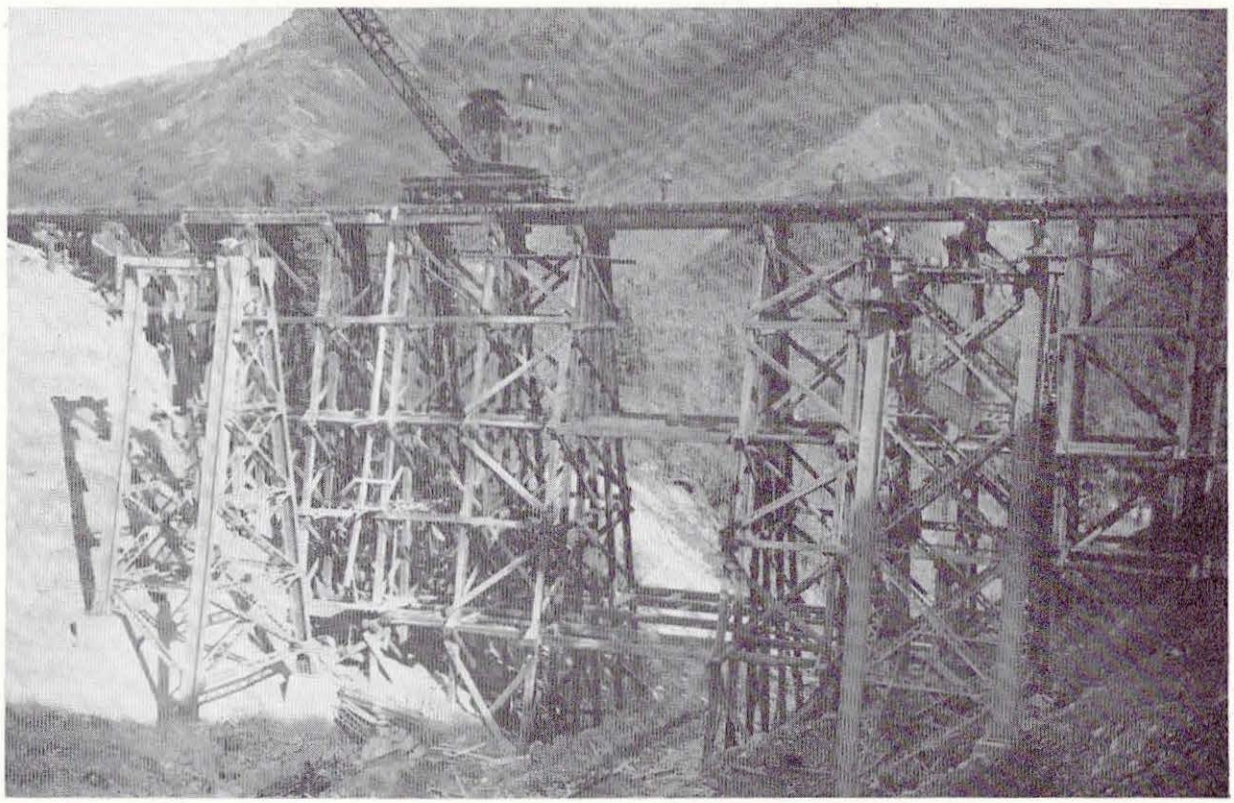
This is among the less important projects because the track has been fairly well ballasted and bank-widened in previous years, and not too much work is involved in order to put it in first-class condition. Both curvature and grades are light.

Last in order of importance is that portion of the line between Anchorage and Potter, a distance of 13.7 mi. Potter, at Mile Post 100, is at the foot of a one-per cent ruling grade which limits the tonnage that can be carried between Whittier and Anchorage. A line change is proposed here which will not appreciably reduce the maximum gradient but which will reduce curvature from 5 deg. to 3 deg., with some favorable effect upon northbound tonnage trains.

In general, the line improvement and bank-widening work will include the widening of the subgrade from 16 ft. to 20 ft.; the elimination of sags existing since the time of original construction; the operation of gravel pits; the loading, hauling and placing of ballast; the surfacing and lining of track to stakes set by the railroad's forces; the standardization of curvature by the introduction of the A.R.E.A. spiral, replacing the Hood taper formerly used on the road; the raising of bridges to conform to the new grade line; the extension of some culverts; and the construction of other culverts, either replacing existing wood boxes or replacing timber bridges to be filled in.

All sidings are to be extended to an average length of 4,500 ft., and some entirely new siding subgrades will be constructed, providing for industrial trackage and additional passing tracks at selected points. The line changes planned will either reduce individual curves or eliminate reverse curves by the introduction of simple curves or of reverse curves with tangents of greater length between them. The bank-widening material to be used will be gravel or other material of a porous nature in order to eliminate frost heaves as much as possible, and to insulate the ballast from perma-frost (permanent ground frost), which exists on the north portion of the line.

Thus, it is expected that the 1949 program will give the dilapidated Alaska another substantial push toward modernization, both in the interest of the industrial and military needs of the territory, and of providing greatly improved service at substantially lower annual maintenance cost. All of the work is being carried out under the direction of the Department of the Interior, of which Julius A. Krug is secretary. Actual work is being done under the direction of Col. J. P. Johnson, general manager of the road, who came to the Alaska shortly after V-J Day, following four years' service in the Army's Transportation Corps in Burma, China, India, and along the Persian Gulf. Earlier, Col. Johnson had served 24 years with the Atchison, Topeka & Santa Fe. The work in the field is being carried out under the general direction of R. A. Sharood, chief engineer—formerly with the Northern Pacific.



Replacing a timber trestle with a steel structure to include an 85-ft. center span, two 13-ft. tower spans, and two 70-ft. approach spans

SAYS RAILROADS AND UNIONS "MUST REAWAKEN" TO RESPONSIBILITIES

National Mediation Board, in unusually forceful annual report, warns that compulsory procedures will come if present provisions of Railway Labor Act prove inadequate; "not a good record," it says of conditions during year under review

Railroads and unions representing their employees "must reawaken to their responsibilities" under the Railway Labor Act if "compulsory procedures for dealing with railway labor disputes" are to be avoided, the National Mediation Board warned in its annual report for the fiscal year ended June 30, 1948, which was submitted recently to Congress. The report expressed the board's own view that procedures of the act "are adequate in their present form," but it asserted that "public opinion," the "chief force" behind the act, "will force changes" if these present procedures "prove inadequate."

The report in general is more forceful than its recent predecessors, which were wont to emphasize the great number of "peaceful settlements" as compared with the relatively few strikes. While the present report also totaled up the "peaceful settlements" in order to put the strike record "in proper perspective," it hastened to add: "The peaceful settlements do not, however, make up for the instances in which stoppages occurred. It is not a good record and it does not bode well for the future effectiveness of the Railway Labor Act." In another place the report said that there were "relatively few" instances during the fiscal year in which the act's procedures "were ineffective in settling the disputes and avoiding work stoppages"; but there the board followed through again to add that this statement "should not be interpreted to minimize the seriousness of the few instances where the law failed to prevent interruptions of service."

Era of "Unsettled Labor Conditions"

Meanwhile, the report had got under way with the board's general statement that "the era of unsettled labor conditions which has plagued industry generally during the post-war adjustment period has not spared the railroads and airlines." Employees "caught in the bind of higher living costs have endeavored to preserve their purchasing power by seeking wage increases" the report added. It went on to say that "determined employer resistance" to these employee demands had resulted in "some of the most bitterly contested disputes in the history of the Railway Labor Act." The "determined employer resistance" was attributed to the fact that railroads and the air lines, over which the board also has jurisdiction, "are regulated industries to the extent that the government fixes rates from which their revenue is derived."

First of the fiscal year's big labor disputes reviewed by the board was that involving the nationwide strike threat of the so-called "holdout" operating unions — the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, and the Switchmen's Union of North America. As the report recalled, the walkout ordered by leaders of these unions for May 11, 1948, was averted when President Truman seized the railroads for operation by the Secretary of the Army, and the Attorney General obtained from the courts an injunction against the strike. "Although the above procedures were effective in preventing the strike," the board observed, "they did not settle the dispute and, as so often happens, it remained for this to be accomplished eventually through mediation."

B. of L. E. "Openly Disregarded" Act

After commenting next on strikes of air-lines employees, the board came to its discussion of a railroad case which it called "notable" among the walkouts of the year under review. This was the July 21, 1947, strike of Southern Pacific engineers represented by the B. of L.E., and it involved grievances which the act places under the jurisdiction of the First Division of the National Railroad Adjustment Board. An emergency board was nevertheless appointed by President Truman when the strike threat was posed; but the walkout occurred before the expiration of the act's 60-day "cooling-off" period, i.e., the 30 days given an emergency board to make a report and the 30 days thereafter during which neither side is supposed to change the conditions out of which a dispute arose.

"These provisions," the report said, "have been interpreted uniformly to forestall strike action for a total of 60 days where emergency boards are created under section 10. Openly disregarding these provisions, however, the brotherhood withdrew its men from the service for about six hours during the night of July 21, 1947."

Another "important railway strike" discussed by the board was that of Chicago, North Shore & Milwaukee employees, which resulted from that road's failure to grant a wage increase recommended by an emergency board. This strike lasted from March 27, 1948, until June 25, settlement having "finally" been effected, as

the report put it, "after persistent efforts by the board's mediators under conditions which were far from favorable." The report also referred to "minor stoppages" involving employees of the Bingham & Garfield and the Akron & Barberton Belt; and to the strike of the Railway Express Agency's vehicle employees in New York, who are represented by the International Brotherhood of Teamsters. That strike, the board said, "was called by local union officers in disregard of the provisions of the law"; but "eventually, however, these same officers recommended and succeeded in obtaining a resumption in service."

Emergency Boards Should Be Heeded

The board's warning of the threat of "compulsory measures" came in its discussion of "mediation proceedings." There it outlined the act's present procedures, describing them generally as procedures which "assume that if the facts of a dispute are thoroughly considered and made public the pressure of public opinion will form in favor of a fair and square settlement of the dispute." As the board pointed out, there is nowhere in the act any compulsion on either party to settle a dispute; nor is there anything "which abridges the right of employees to strike," or "which requires either employees or carriers to accept the conclusion of a Presidential emergency board."

After saying all that, however, the board went on to indicate its own view that emergency-board recommendations should be accepted. It said: "Having had access to all the processes of collective bargaining, and then having had the dispute heard and considered by an impartial fact-finding board, the implications are strong that the recommendations of such a board should in good grace be accepted by both parties as a proper basis for settling the dispute." This comment was followed by a statement wherein the board said the act was the product of more than 60 years' experience in federal legislation dealing with settlement of railway labor disputes; and continued to say:

"In its present form, the essence of the law is to avoid interruption to the nation's railroad transportation without resort to force. Our nation could not afford such interruptions in 1888 and we can afford them even less in 1948. Every action to circumvent procedures of the law where an emergency threatens weakens the act and brings a wave of public concern regarding other procedures for preventing interruptions to transportation service. . . . These [present] procedures cannot be disregarded indefinitely with impunity. Both carriers and the employees have a heavy responsibility under the act to exert every reasonable effort to make and maintain labor agreements and to settle their disputes in order to avoid any interruption to interstate commerce."

Deplores "Hurried" Mediation

As an example of what the board considers a failure to meet these responsibilities in the past, the report referred to "an attitude on both sides to get through direct negotiations and mediation in a hurried and perfunctory manner assuming no chance of settlement by these procedures and hastening referral of the dispute to an emergency board." The "past success" of the act was attributed by the board to labor-management "cooperation in reaching orderly settlements."

"The board feels certain that neither side would willingly tear down the successful plan which they worked so long to build. Stricter and more careful observance of their responsibilities will serve to avoid this undesirable result. The board's views on this matter are born out of distrust in proposals for compulsion and prohibitions in the field of labor relations. It is greatly to the interest of both carriers and employees to help make the law work as intended."

As to representation disputes, the board reported that such cases involving the train and engine service unions were "notably absent" from its docket during fiscal 1948. It explained that the principal disputants of former years were the B. of L.E. and the B. of L.F. & E.; but those brotherhoods "have been endeavoring to combine their organizations and have called a truce in efforts to win each other's representation rights." A similar "truce," the board also reported, has been agreed upon by two other rivals of previous years—the Brotherhood of Railroad Trainmen and the Order of Railway Conductors. Meanwhile, as the report put it, "there was no noticeable slackening" in contests between American Federation of Labor and Congress of Industrial Organizations unions for employee-representation rights.

Still Concerned About Adjustment Board

That section of the report which dealt with activities of the Adjustment Board registered again N.M.B.'s "concern over the problems arising out of the failure of the First Division to make prompt awards in disputes involving train and engine service employees." That division ended fiscal 1948 with 2,449 pending cases, which, the report pointed out, was "a three-year backlog of work based on the number of cases closed during the year." It went on to suggest that these figures do not tell the "whole story," because, "due to the long delays in securing awards, many cases which should normally be filed with the division are made the subject of a strike threat." The report added that:

"It is the view of the National Mediation Board that the carriers and brotherhoods should endeavor to agree upon needed changes in the division's rules of procedure to promote expeditious settlements. The continued inability of the division to keep abreast of its docket is one of the most serious administrative deficiencies under the act. In making these recommendations the Mediation Board is fully aware of difficulties in the way of solution of this problem. Nevertheless, its seriousness demands the diligent efforts of both sides to agree upon a practicable solution. Their failure to agree will lead to a remedy through Congressional action."

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Citizens Public Expenditure Survey, Albany, New York

formed in three steps. The holes in the lid are alined with holes in the box, and the retaining pin is inserted. The second step is to push the lid down enough to put the spring under pressure and then withdraw the shipping pin, which is discarded. The third and final step is to push the lid all the way down and bend the flanged hood ear in place.

Once installed, the Alcolid is said to be free of vibration. A torsional spring exerting a 50-lb. pressure keeps the lid permanently sealed against the box face. The square-headed retaining pin is held securely in place by a flanged hood ear bent over the pin head. Locked against longitudinal movement, the pin cannot rotate, and becomes an integral part of the lid. A feature of the lid is the roller mounted on the lid spring which forms a roller bearing to aid in easy opening and to prevent wear and consequent binding on the lug cam of the journal box.

VAPOR OK-4625 STEAM GENERATOR

The Type OK-4625 steam generator for Diesel locomotives, recently announced by the Vapor Heating Corporation, Chicago is a compact unit designed to give increased capacity, reliability and flexibility in supplying the large amounts of steam required for heating long passenger trains under extreme winter conditions, and for cooling these trains in summer when steam-jet air-conditioning equipment is installed.

Vapor OK-4625 steam generator as set up for display and test purposes at the Chicago plant

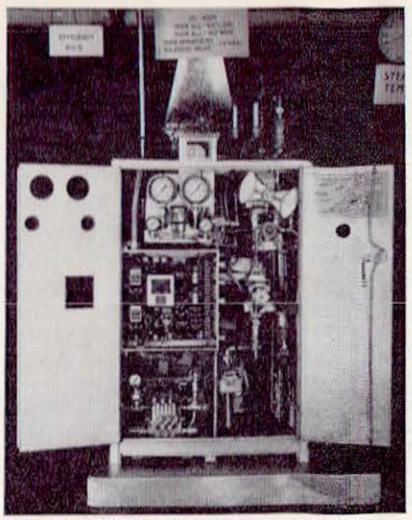
Utilizing Intensi-Fired combustion and various other improvements, this generator is said to produce 2,500 lb. of 99 per cent quality steam per hour at 81.2 per cent generator efficiency and with 20 per cent overload capacity. This is about twice the capacity of the present Vapor 1,600-lb. steam generator, but the floor space required is practically the same.

The relatively small size of this generator will permit installing dual units to secure a capacity of 5,000 lb. per hr. when required and give added reliability in service. The controls have been simplified and largely concentrated in a cabinet at the front of the generator for more convenient adjustment of controls and also for greater flexibility in locating the unit in the locomotive. This design permits full steam pressure to be obtained within two minutes from a cold start.

The basic construction of the Vapor OK-4625 unit is similar to that of previous models. It is a coil-type steam generator with patented stagger-coiled assemblies properly compensated for expansion and designed to split into narrow films the combustion gases which flow in opposite direction to the course of water through the coils. The heat release is 1,000,000 B.t.u. per cu. ft. of combustion space and the fire pot is air cooled to permit delivery of a large amount of heat from the burner nozzles. The small quantity of steam and water in the coils makes it practically impossible to have a steam explosion.

There are over 500 ft. of steel tubing with 170 sq. ft. of exterior surface in the inner, intermediate and outer coils of this generator. A fourth economizer coil with about 59 ft. of tubing and 15 sq. ft. of surface area has been added which is located in the path of the exhaust gases as they enter the stack and reduces stack temperature to about 550 deg. F., thus increasing the efficiency. This short coil, replaceable with comparative ease, takes the main internal oxidation attack of heated water at the inlet and eliminates the external corrosion formerly caused by acids resulting from contact of exhaust gases with sweating on the outer coil.

A more efficient and hotter fire for steam generation is secured by the Intensi-Fired combustion which consists mainly of offsetting the blower so that air enters the firepot in a tangential direction. This gives a swirling action which assures better mixing of fuel and air and also more rapid transfer of heat to the coils. This generator operates at a lower stack temperature and higher oil efficiency than previous Vapor models. The pump runs at 900 r.p.m., compared with 1,200 to 1,600 r.p.m. formerly required. The back pressure in the feedwater is reduced 20 per cent.



Control cabinet at the front of the steam generator with doors open to show interior equipment

The controls are arranged for maximum efficiency, self-drainage and availability. A single electric motor operates the fuel and water pumps, blower and ignition system. The Vapor-Servo control, hydraulically operated, properly proportions the air delivery and the oil with the amount of water needed to satisfy the steam demand. All valves are fitted with identifying handles, those normally closed being round and those open being cross-type.

The generator is protected against superheat by a steam-temperature limit control. An air transformer filters air to the fuel-nozzle line. An electric switch is built into the regulator for cycling the generator on when demand necessitates. The fire is adjusted to evaporate all but 10 per cent of water flowing through the coils. Sludge formed by water treatment settles to the bottom of a separator and is periodically blown to the ground.

The power consumption is minimized, being 2 amp. per 100 lb. of evaporation, total load. The motor is a motor converter which drives the blower, water pump, fuel pump and also has slip rings built in for the ignition transformer. The gauge panel is visible from all angles. Only one 75-volt electric bulb is needed to light the controls and gauges.

The electric control panel consists of two heavy-duty relays for starting and running sequence. An alarm relay and a time-delay relay are provided in case the fuel supply, air supply or ignition should fail. A resistor permits motor voltage adjustment to that used by various Diesel locomotive builders. The electric control panel is hinged so that it may be swung out of the way when removing the main motor and for greater accessibility in servicing.

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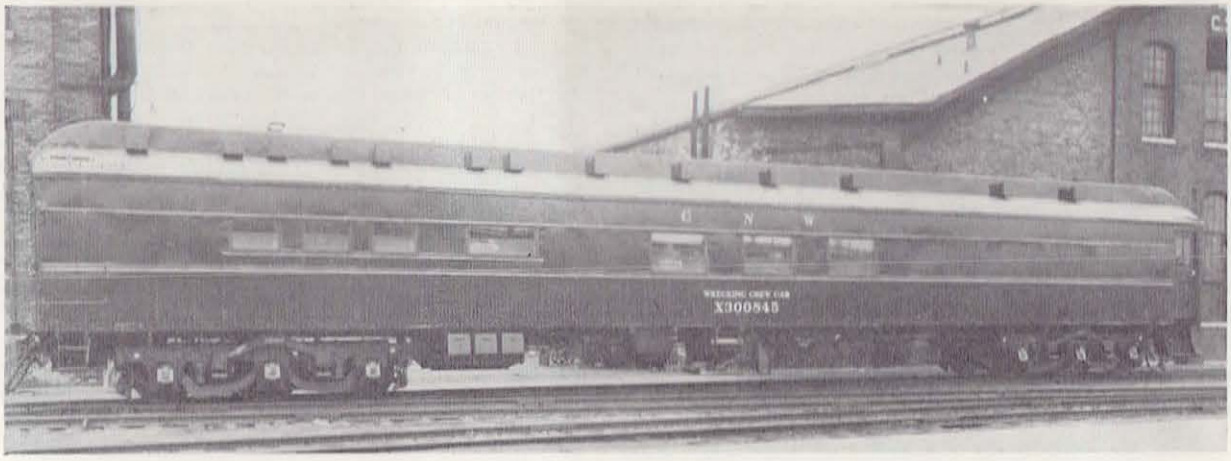


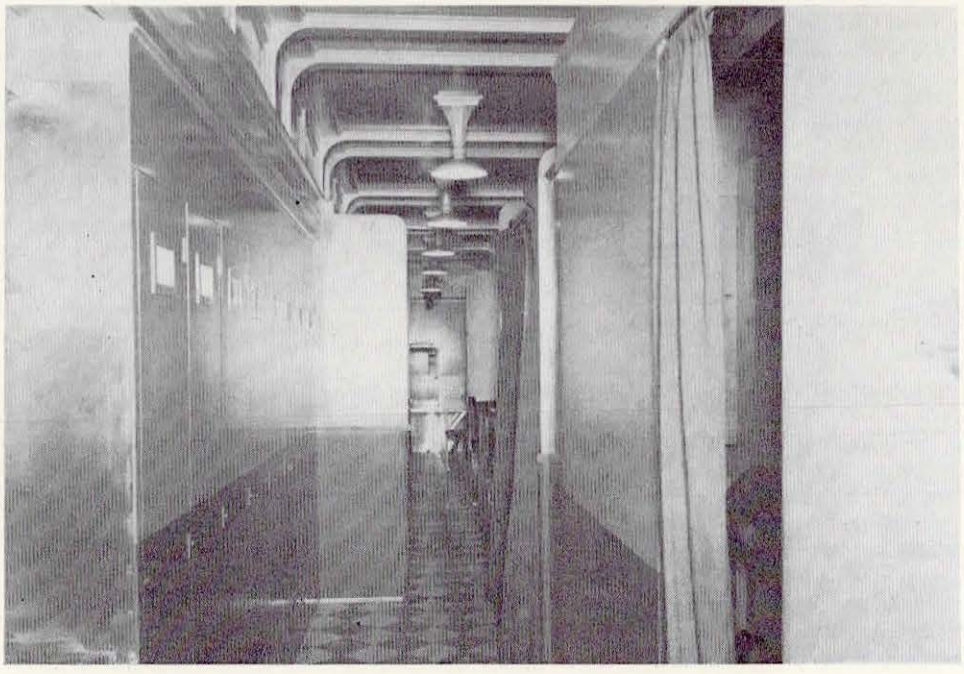
C. & N. W. CONVERTS DINER

The Chicago & North Western, on January 3, placed in service a special wrecking crew car which promises new standards of comfort for railroad personnel engaged in picking up derailed equipment. These crews are often subjected to long hours of service under adverse climatic conditions, and the desirability of furnishing them with comfortable living accommodations while on the road has long been recognized.

The new car, converted from an 82-ft. steel diner, is equipped for the purposes mentioned and will be used as part of equipment accompanying the recently-purchased 250-ton Bucyrus wrecker, assigned to the Galena and Wisconsin divisions and the Chicago terminal and located at Proviso, Ill. It is planned ultimately to equip all wrecking outfits on the road with similar cars.

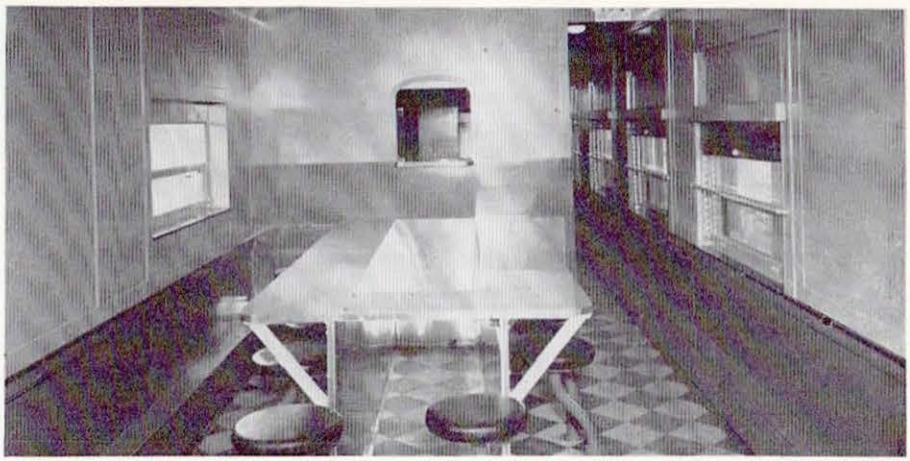
The wrecking crew car, as converted at the Chicago shops of the C. & N. W. in accordance with designs developed by G. R. Andersen, superintendent car department, utilizes the original kitchen without change except for the addition of a 40-gal. Crane hot water heater and a six-burner stove, both of which use propane gas for fuel; also two overhead water storage tanks of 250 gal. combined capacity. Two compartments, each carrying three propane gas tanks, are located under the car and supply fuel for the stove and the hot water heater.

Directly adjacent to the kitchen is a 19-ft. lunch room with horseshoe counter designed to seat 10 people



Wreck master's compartment and office (right); individual crew members' lockers (left)

Facing page—New C. & N. W. wrecking car converted from an 82-ft. retired dining car



Right—Food is dispensed to the 10-seat horseshoe lunch counter through an opening in the kitchen partition

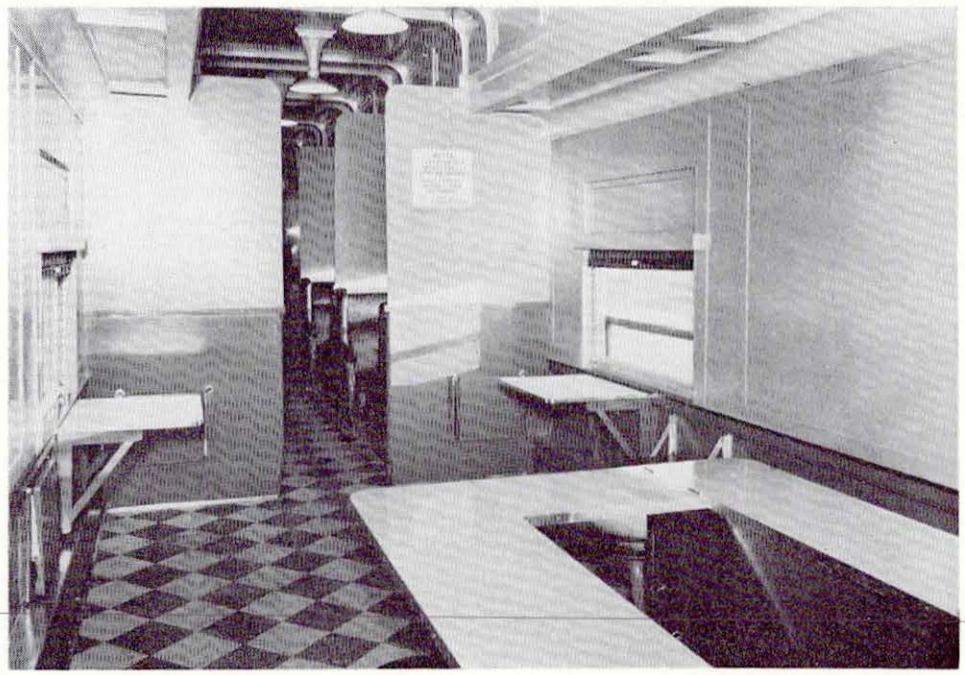
INTO COMFORTABLE QUARTERS FOR WRECK CREW

at one time. Food is dispensed to the counter through an opening in the kitchen partition. Seats of the swinging type fold under the counter when not in use. The lunch room also has two drop tables and individual drop seats for other use as needed. The floor of the lunch room and other parts of the car, except the kitchen, is covered with Terraflex plastic tile.

Next to the lunch room, an 18-ft. 9-in. sleeping section with five Pullman sections—upper and lower berths—furnishes accommodations for 10 men. In addition, there is an 8-ft. 8-in. roomette-type compartment for the wreck master which can also be utilized as an office. This end of the car is equipped with toilet room, supply lockers, shower bath, four Alleghany steel wash basins and eight individual sealed lockers for the crew.

A Vapor No. 557 coal-fired heater furnishes hot water for heating the car. Electricity for lighting the car and operating fans is supplied from a gasoline-engine-driven 1-kw. generator, located in a box-tool car directly ahead of the crew car. The only other change made in the car structure was closing up three windows on one side of the car and one window on the opposite side behind the locker and wash basin sections.

Interior view of the wrecking crew car looking over the horseshoe lunch counter towards Pullman sections



DEPRECIATION CHARGES SHOULD VARY WITH REPLACEMENT COSTS

American industry, including the railroads, is inaccurately adding to profits amounts which really represent consumption of physical assets

By ARTHUR K. ATKINSON
President, Wabash

I am informed that the Controllers Institute of America made a cross-section survey of its members some months ago which disclosed that about 80 per cent of those responding were not in favor of changing the time-honored method of accruing depreciation on the basis of original cost. I also note that the committee on accounting procedure of the American Institute of Accountants recently published its report recommending no change in the present method of accruing depreciation for the time being. This report, in which 17 committee members concurred and 4 dissented, is said to be based on a study extending for over a year during which time the opinions of business executives, economists, and other financial experts were considered.

In spite of this apparent opposition by the majority of the accounting profession, many corporations including several large and successful companies have nevertheless issued their annual reports containing provisions in their income statements for substantial sums to compensate for the inadequate depreciation charges due to the inflated present-day cost of replacing worn-out plant and equipment. United States Steel, Sears Roebuck, Armco Steel, and Sun Oil Company, to mention only a few, have recognized that soaring replacement costs make present depreciation allowances under the law not only ridiculous, but distressing and dangerous. I have no doubt that many more corporations will adopt this new accounting concept when issuing their financial reports for the business year 1948.

Dislike for Change

In attempting to find the reason for opposition to recognition of increased replacement costs, I have concluded that there can be only one answer, that is, the natural dislike for change. We had an example of this attitude early in November when 24,000,000 Americans expressed their fear of the consequences of a change. Probably many look upon this new theory as just another scheme to reduce corporate taxes which could never be "sold" to Congress, much less the experts in the Treasury Department. Obviously, this is an easy way to put the problem out of mind and continue on down the same old rut in the road to curtailment of operations, public financing of replacements, or even insolvency.

A similar problem which business faced for many years in connection with inventory profits and losses arising from price fluctuations was, for all practical purposes, solved when the so-called "last in—first out" or "LIFO" method of accounting began to be used by alert corporations in the Thirties. It was not long before Congress and the Treasury Department recognized the sound principles of "LIFO" and it became a part of the Internal Revenue Code. Concerns which have adopted "LIFO" may figure their inventories as nearly as possible on replacement costs, thereby avoiding inventory profits in a rising market and providing some insurance against a severe loss from a general price drop. The selling prices of their products can more accurately reflect the current replacement cost of the materials which went into those finished products. "LIFO" is not the perfect solution to the inventory problem but it has helped considerably those firms which adopted it at an early date when the rising price spiral began, and when prices come down again I can see no reason why those same firms should not be far better prepared to weather the storm.

Depreciation on the basis of current costs of replacement, as I see it, is a young brother to "LIFO." It has a much greater opportunity to be of service to the world of business, as there are many concerns in a position to enjoy its advantages which are not the type of business having substantial inventory turnover, and, consequently, have no practical use for "older brother, LIFO."

The corporate form of doing business was developed many years ago when it became apparent that the machine age would require substantial amounts of capital and a continuous life. The antiquated form of private enterprise—that is, the individual proprietorship or partnership—centered around the personality and ingenuity of the individual; and if he was a hard worker, had good health, and inherited substantial wealth, he might look forward to a successful business with a span of possibly 50 years. With the introduction of inheritance taxes and personal income taxes, the individual form of business enterprise was, for all practical purposes, restricted to intrastate operations on a small scale. Corporations became the only form of business enterprise which could have a perpetual

This article is adapted from an address presented in November, 1948, to the St. Louis chapter of the Controllers Institute of America.

life, which could raise capital by a broad sale of stock to small investors, or which could obtain sufficient credit secured not by the business ability or personality of the individual manager but by the security of fixed assets of a permanent establishment.

The present accepted method of accruing depreciation on the basis of original cost was not conceived to allow business to have permanent life—its purpose was merely to return the original cost over the normal life of the asset. It is just a "happen-so" if the cost of replacing worn-out plant or an obsolete machine is available in the depreciation reserve at the proper time. We so often do not replace in kind that we lose the opportunity to compare the cost of a worn-out asset with the present-day cost of its replacement. Nevertheless, it is becoming clearer every day that our depreciation reserve accounts are grossly inadequate and that a substantial portion of yesterday's profit must be used for tomorrow's replacement cost unless we are willing, either to reduce operations or to seek new capital to cover the deficiency in the reserve account.

Based on the assumption that a corporation is a legally conceived creature which will continue indefinitely, management has the responsibility to see that capital is preserved intact. It is important that this fundamental principle of economics be understood by all elements of the community—government, management, investors, and labor.

Need for Venture Capital

I agree with statements made recently by Emil Schram, president of the New York Stock Exchange, and others to the effect that there is a serious need for venture capital in our national economy. Venture capital has almost disappeared due to the high taxes, government regulation of business, and the general feeling of instability which has prevailed since the crash in 1929. How may we expect to encourage more venture capital to aid the nation's progress if we cannot devise accounting principles and correct taxing statutes to prevent the dissipation of capital already invested?

Unfortunately, our corporation books cannot list the fixed assets as so many bricks, ties, cubic feet of concrete or tons of finished steel rail, etc., but must convert all items to dollars. But dollars have no economic value except as measured by what that dollar will buy. But when? Yesterday? Of course not! We in the business world must work with today's dollar and the bricks, ties, concrete and steel that dollar will buy today. Nevertheless, we continue to follow the old concepts of accounting and publish our balance sheets listing our fixed assets at cost, representing dollar values of a great span of years in the past. When we make up our profit and loss statements we subtract from our current revenues, which are today's dollars, depreciation for the wear and tear of our fixed assets, computed on original cost—yesterday's dollars. The result of adding and subtracting all these different kinds of dollars gives us a figure we call net income or profit, a substantial portion of which we must set aside—for we know that our reserve for replacement of those fixed assets used up to produce that net income is not sufficient to cover the present dollar cost.

Our daily newspapers are filled with reports and articles telling the public that 1948 corporation profits are double those of 1929; that big business in its greed to reap even greater profits is the cause of the high cost of living and should therefore be the target of more wage increase demands, another excess profits tax, and more federal control. The poor stockholders are not enjoying this alleged boom in corporate business. Neither the average stock market quotations nor the record of dividend payments is much better than in prewar years of 1938 to 1940. Business management realizes that the figures appearing beside "Net Income" in corporation earnings reports are falsely named and falsely computed. Many of these fictitious profits, if recomputed on a sound economic basis, making provision for maintaining real value, would become much smaller if they did not disappear altogether.

The publication of corporation annual reports on the basis of accepted accounting practices, without footnotes explaining the substantial underaccrual of depreciation, is misleading to our investors, our employees, and to the general public. The unions' most successful strategy has been to lay before arbitration boards the financial reports of corporations, and many other statistics concerning comparative earnings records of industry over a period of years, as compared with the record of wages paid and the increase in the cost of living.

In May of this year General Motors entered into an agreement with its unions affecting 225,000 employees. This wage contract included, among other things, a clause which permits a one-cent-per-hour wage adjustment for each 1.14-point change in the Federal Bureau of Labor Statistics' Consumer Price Index. This escalator clause works both ways. There is no limit on the up side, but the contract provides that the company cannot reduce wages more than 5 cents per hour between now and 1950 should the cost of living go down. The company must get together with its unions every three months and examine the Consumer Price Index to determine the adjustment to be made in the wage scale. When this wage settlement was consummated, union leaders hailed the agreement as proof that the company accepted "the principle that prices and profits are a concern of labor." Similar formulas have been used to solve other labor disputes, and it is only reasonable to assume that with the demands for the "fourth round" of wage increases, which are expected momentarily, we will be faced with additional arguments addressed to the relationship of current costs and corporation profits. If labor's wages can be hitched to the economic dollar, why should not corporation accounting and taxes likewise be so modernized?

Inadequate Depreciation Reserve

The inadequate depreciation reserve is an especially serious problem to those corporations which have substantial blocks of stock owned by few stockholders. Many of these corporations are conscious of the underaccrual of depreciation but hesitate to set aside sufficient net income in special reserves for replacement due to the fear that section 102—the penalty surtax for unreasonable accumulations of surplus—may be applied against them. It is my sincere hope that the courts, if not the Bureau of Internal Revenue, will apply the sound principles of depreciation on the basis of

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load per car and some of that faster turnaround time that shippers had told the carriers would mean money in their pockets. As to loss and damage decreasing if pallets were used more widely, he said, the possibilities were good, but study was needed before any very definite information could be obtained. All in all, Mr. Milliken said, the possibilities for the carriers were good, and he called for a full-time joint carrier-shipper committee to study this problem, and suggested the railroads' stores departments as a laboratory in which to begin the committee's work. He closed by suggesting that more thought be given to the use of the unit load without the pallet, which "has been badly neglected and offers many possibilities."

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Many railroad men were among the approximately 17,500 persons attending the show. Included among them was the materials handling committee of the Purchases and Stores Division of the Association of American Railroads. Much interest was shown in many new items, such as the Yale gas fork truck, the Mercury 1-ton electric burden carrier and the fork truck attachments, displayed by all the truck manufacturers, which will pick up unit loads without the use of pallet or strapping material.

life, which could raise capital by a broad sale of stock to small investors, or which could obtain sufficient credit secured not by the business ability or personality of the individual manager but by the security of fixed assets of a permanent establishment.

The present accepted method of accruing depreciation on the basis of original cost was not conceived to allow business to have permanent life—its purpose was merely to return the original cost over the normal life of the asset. It is just a "happen-so" if the cost of replacing worn-out plant or an obsolete machine is available in the depreciation reserve at the proper time. We so often do not replace in kind that we lose the opportunity to compare the cost of a worn-out asset with the present-day cost of its replacement. Nevertheless, it is becoming clearer every day that our depreciation reserve accounts are grossly inadequate and that a substantial portion of yesterday's profit must be used for tomorrow's replacement cost unless we are willing, either to reduce operations or to seek new capital to cover the deficiency in the reserve account.

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In a Vista Dome observation-lounge car built by the Budd Company for the Chesapeake & Ohio

the economic dollar when they compare dividend distributions with the annual additions to corporate surplus in determining whether or not a corporation is accumulating surplus beyond its reasonable needs.

If we are willing to admit that the old tried-and-found-untrue method of depreciation on cost should be replaced with a brand new machine designed to produce annual reports and income tax returns clearly reflecting a true picture of operations, how can we construct and operate that machine?

Depreciation computed on estimated replacement cost cannot immediately be adopted by regulated industries, but there is no valid reason why non-regulated industries could not make appropriate additional accruals properly identified on income statements and balance sheets as "reserve for asset amortization and replacement," or by some other clear terminology. This, of course, would require reconciliations and adjustments in connection with tax returns and other reports to governmental agencies which recognize depreciation only on original cost. We should incorporate in our annual published reports to stockholders, in labor dispute briefs, in applications to price control boards or rate fixing bodies, and in advertising, a statement clearly explaining the inadequacy of our regular depreciation accruals and showing the estimated correct amount which should be accrued. We can reasonably estimate the amount of underaccrual to provide for replacement of fixed assets, as there are many reliable indices available to place current values on almost every type of depreciable asset.

As an example, in the railroad business we have been regulated by the Interstate Commerce Act since 1887 and, since 1915, have furnished the Interstate Commerce Commission with detailed construction cost data annually. From this information gathered from all sections of the United States, construction cost indices are compiled and these figures are customarily released within a few months after the close of the calendar year for which submitted. Certainly, with proper cooperation on the part of the various railroads, the basic information could be promptly furnished periodically during the year so that the final indices would be available by February 1 following the close of the year, and prior to the time required for annual reports. The railroads could then readily revalue their property accounts on the basis of present-day costs. Our records fairly well record the acquisition date and cost of all depreciable assets, and acceptable indices can be worked out and applied to any type of asset to arrive at the present value or reproduction cost. For instance, a station building built in 1910 or a locomotive placed in service in 1925 could be valued today by merely computing the ratio of today's indices to the indices for the time of purchase and applying that ratio to the original cost.

When the I.C.C.'s 1947 construction indices were published, I asked our accounting department to develop for me the reproduction cost of the Wabash's road and equipment property. The result of this study indicates that the December 31, 1947, cost of reproduction of road property would have been 193 per cent of original cost, and of equipment, 158 per cent of original cost. On this basis, our accrual for depreciation in 1947 should have been approximately $5½ million instead of only $3¼ million accrued in the books—an underaccrual of $2¼ million! Not only did we underaccrue that $2¼ million, but we paid better than three-fourths of a million dollars in federal income and various state taxes on it besides, thereby bringing the total dissipation of assets for one year's operations to more than $3 million. How long do you think we can permit this condition to continue without a most vigorous protest?

Needed by Railroads

The railroads and other regulated industries are especially in need of recognition by the taxing authorities of this new concept of accounting. Our rates are established to allow a depreciation charge based upon prewar costs of plant and machinery. Railroads, unlike the unregulated industries, cannot price their product so that profits will be ample to take care of the underaccrual of reserves to replace their depreciable property. It is only fair and just that the Interstate Commerce Commission should prescribe new methods of accounting to prevent the serious shrinkage in the capital assets of the transportation industry. The other arm of the government with which we have so many dealings, the Bureau of Internal Revenue, should be required to recognize such I.C.C. accounting by proper amendments to the Internal Revenue Code.

Prior to about 1942 the railroads had always held that their roadway property, such as bridges, shops, stations, and other fixed property, was constantly maintained to the extent that there was no depreciation. The I.C.C. and the Internal Revenue Code recognized this principle in permitting railroads to practice retirement accounting, that is, taking the loss in the year of retirement in lieu of an annual depreciation

charge. Just before the beginning of the recent war, the railroads realized that if they were to continue the old practice of retirement accounting in connection with their roadway property they would be in the dangerous predicament of making few, if any, retirements, and that as a matter of fact roadway property did depreciate. The I.C.C., therefore, prescribed depreciation accounting for roadway property, the changeover to be mandatory on January 1, 1943. The Bureau of Internal Revenue permitted this change in the method of accounting on request of the taxpayer but generally required an adjustment to be made for past accrued depreciation of a flat 30 per cent. I believe the railroads are generally agreed that the change to depreciation accounting on roadway property was a forward step.

During the war, the railroads faced another serious accounting problem involving undermaintenance due to the shortage of supplies of materials and labor. They asked for the right to set up an accrual for this undermaintenance and that it be allowed as an income tax deduction so that they would have the funds necessary at the end of the war to rebuild the damage caused by the heavy traffic in the war years. This request was denied, and in lieu thereof, members of Congress stated that corporations should be given two years at the end of the war in which to carry back net operating losses and unused excess profits credits. As you know, when the excess profits tax was repealed in 1945 only one year of unused excess profits credit was allowed as a carry-back. Besides this, the materials necessary to restore our roadway property to the proper state of maintenance still continue in short supply and at ever-increasing costs. We are still trying to catch up on undermaintenance, with resulting tax benefits currently from these expenditures of only 38 or 40 per cent, when the revenue from business causing this undermaintenance was taxed at 81 to 85½ per cent. This undermaintenance problem has accentuated the need for recognition by the taxing authorities of depreciation on the basis of reproduction cost.

There have been some opponents to this new theory of depreciation accounting who state that if adopted it would cause further inflation by adding to the already high cost of production. It seems to me that most unregulated businesses have anticipated the depletion of their capital in setting their present selling prices.

If they have not done so they are not fulfilling their obligations to their investors. The fact that depreciation on the economic dollar is not recognized for tax purposes makes it necessary for a corporation in establishing the selling price of an article, to add $1.61 for each such dollar of non-deductible wear on plant and equipment consumed in the production of that article in order still to have the dollar in reserve after paying the federal income tax. Obviously this practice is inflationary.

The most common objection I have heard from accountants opposed to this proposed change in the method of accruing depreciation is that although it might be helpful at present during a period of inflated costs, it would backfire in the event of a recession when consistent application would require considerably lower depreciation charges, or even no charge at all where the reserve equaled or exceeded the reproduction cost. We in the railroad business have had bitter experiences with depression and bankruptcy. I would not object to cutting back our depreciation charges when our revenues and all other operating expenses are diminishing. Reduced depreciation charges in deflationary periods would be helpful in maintaining a reasonable coverage of bond interest and other fixed charges.

DIESEL IN PAPER MILL SERVICE

Cost data developed by the Southland Paper Mills, of Herty, Texas, indicate that its fuel savings on one Diesel-electric locomotive will approach $10,000 in its first year of operation. The estimate is based on operations to date of the General Electric 45-ton industrial switcher that replaced a 40-year old sawmill logging steamer in December, 1947. Officials of the company say that, at this rate, the unit will pay for itself in about 2½ years.

When purchasing the unit, the prospective users estimated that savings would be about $15 per day. They have discovered that after six months this amount has been more than doubled. In addition to the cut in expenses, according to General Manager W. L. McHale, it is a relief to be rid of the fire hazard from the old steam locomotive where so much valuable paper and lumber is being handled.

The unit hauls the required 15-car load easily and, on occasion, has pulled as many as thirty 84-ton cars. There are 2½ miles of track inside the plant, with .5 per cent grades and 6-deg. curves.

The Southland Paper Mill's 45-ton G. E. switching locomotive at work in the wood yard

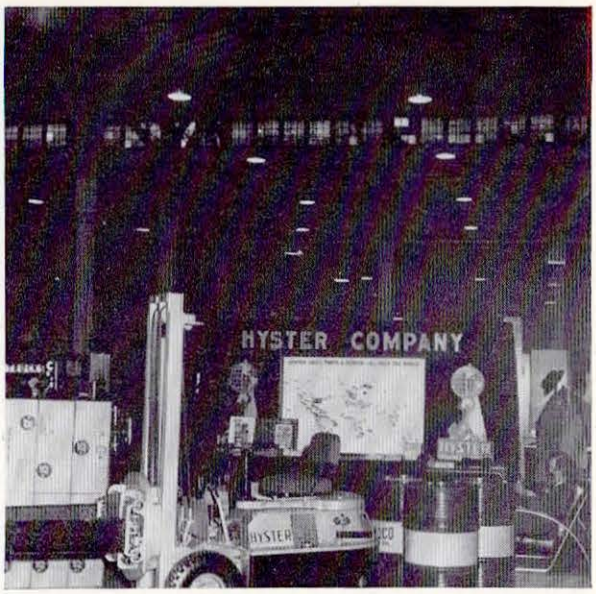
Left—Electric Industrial Truck Assn. exhibit, with C. F. Kells, managing director, operating model electric fork truck. Right—View of Towmotor exhibit showing engine of fork truck in foreground

RAILROADERS SEE MATERIALS HANDLING SHOW

$5 million of equipment of all types on display at Philadelphia's Convention Hall—Rates on pallets discused by Carpi and others

Aside from the cost-cutting equipment displayed at the third Materials Handling Exposition, sponsored jointly by the American Society of Mechanical Engineers and the Materials Handling Institute and held at the Philadelphia, Pa., Convention Hall, January 10-14, the feature of paramount interest to the many attending railroad men was the discussion of palletized shipping, including rates on pallets under load and on empty return. Taking part in this discussion were Fred Carpi, vice-president, traffic, Pennsylvania; Neil Loney, industrial consultant, Detroit, Mich.; W. F. White, engineer, Great Southern Trucking Co., Jacksonville, Fla., and J. W. Milliken, associate editor, *Railway Age*, New York.

By this time most directly concerned railroaders are probably familiar with industry's various recommendations for rates on pallets, in order to make pallet shipping economically feasible, such as the 1,000-lb. dunnage allowance on the going or loaded trip, a rate of 27½ per cent of first class any quantity, on pallets being returned empty, etc. Mr. Carpi, in his paper, told his listeners that as yet industry had not proved that the carriers would eventually profit by making such concessions, although 27½ per cent of first class, 36,000-lb. carload minimum, had been granted on pallets returning empty to owner. Improved turnaround time of cars, increased load per car, and reduction in loss and damage, through the use of pallets, were, he said, still only talk. The request for the dunnage allowance was based, he said, on the false conception of "pallets as being dunnage. Dunnage is the blocking and bracing placed in cars, such as in the doorway section, to prevent shifting of the load in transit. Dunnage has no relation to the individual packaging. . . . After all, a palletized shipment still requires adequate blocking and bracing to prevent shifting and resulting damage in transit, such as is required with any other type of shipping unit." Furthermore, the dunnage allowance would produce serious discrimination between shippers, Mr. Carpi declared, for "If dunnage allowances were extended to include pallets, the shipper not interested in palletization would have justifiable claim to similar weight allowances on the crates, barrels or boxes which are utilized by him as individual shipping units. . . . Shippers have always paid freight charges on all types of shipping packages, including everything which comprises the individual shipping unit, and the rate levels reflect this established procedure. Conces-



Left—Whiting booth featuring electric chain hoists. Right—Hyster at Philadelphia. Fork truck with load grab device for handling unit loads without pallet

sions would quickly eliminate this accepted practice and result in serious loss of revenue. The carriers just cannot afford the consequences."

As to the rates on return of pallets, Mr. Carpi said that there had been a recent request to provide rates on small quantities (l.c.l.) of empty pallets at 25 per cent of first class. The carriers are "considering substitute suggestions more in keeping with the realities of the situation," he said. Further concessions (below 27½ per cent of first class), he continued, might result also in a breakdown of the rate fabric applicable to lumber and lumber articles.

More Study Needed

Mr. Carpi suggested that there were several possibilities for avoiding or minimizing the return of empty pallets, namely the so-called expendable pallet and the pallet pool plan through which shippers and receivers would interchange pallets so as to minimize their movement, "in somewhat the same manner as the railroads distribute and interchange their car supply." Mr. Carpi concluded by saying that the rail carriers would continue their study of this problem, "For it is keenly realized that any development which tends to reduce handling costs indirectly benefits the carriers."

Mr. White, while admitting that movement of unit loaded freight would mean handling savings for the highway carriers as well as for the shipper and consignee, said that this would bring up problems of rates and return or exchange of pallets, "as well as certain adjustment of rates to warrant the shipper's cooperation in the program."

Mr. Milliken, in his paper, said it was his opinion that there had been too much talk and not enough work on this subject. Therefore, he felt that no one knew what economies might accrue to the carriers if they granted some of the rate concessions that shippers were asking. By asking for the 1,000-lb. dunnage allowance on pallets under load, he said, shippers were asking the carriers to perform work for which they would get no direct reimbursement. "How much work? There is, I think, no definite answer at present," Mr. Milliken continued, "but let us assume that one authority was correct in his estimate that in 1948 8,325,000 cars of freight could have been palletized. Therefore, in that year, if the railroads had allowed the 1,000-lb. dunnage allowance some shippers are seeking, they would have performed the work necessary to haul 4,162,500 tons with no direct reimbursement. Today the average load per car is about 36 tons. At that rate you would be asking them to haul 115,625 carloads of materials for nothing, or handle 1,156 hundred-car trains. Now if those 4,162,500 tons had been rated at an average as low as 30 cents per cwt. they would have yielded $24,975,000. That's equal to four times the net profit the Gulf, Mobile & Ohio expects to make for its 1948 operations. Do you wonder that the railroads are thinking twice before jumping?"

Mr. Milliken went on to say that his observations had led him to believe that there might be advantages of a very substantial nature which would come to the railroads if, in conjunction with some rate concessions, higher minimum carload weights were made mandatory on palletized freight and a heavy demurrage charge were made which would begin at the end of 24 hours after constructive placement when palletized freight was loaded or unloaded. These might insure the heavier

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FREIGHT WORK DONE BY DIESELS VARIES WIDELY

Range on large roads from 94.95 per cent of total to none shown in latest issue of I.C.C. bureau's "Monthly Comment"; other articles on working-capital position of Class I roads, shifts in preponderance of traffic by direction, and prospective yield from Ex Parte 168 interim freight-rate increase

Proportions of total freight-service gross ton-miles handled by Diesel-electric locomotives on 36 "large steam railways" during the first 10 months of 1948 ranged from 94.95 per cent on the Gulf, Mobile & Ohio to zero on the Illinois Central and Norfolk & Western. The comparison, covering railroads with 1947 operating revenues above $50 million, was made by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment."

It was part of an article in which the bureau discussed the railroads' showing during last year's first 10 months as measured by "indicators of operating efficiency in freight service." Other articles covered the net working capital position of Class I roads as of October 31, 1948; shifts in the preponderance of rail traffic by direction; and the estimated yield from the freight rate increase authorized by the commission in its December 29, 1948, report on the interim-relief phase of the Ex Parte 168 proceeding.

The latter was given first place in the "Comment," and it put the over-all average increase at 5.2 per cent, as did the article reporting the decision in the *Railway Age* of January 8, page 242. Like the notice issued with the decision by I.C.C. Secretary W. P. Bartel, the "Comment" put the estimated annual yield at $425 million. By territories, it estimated that the increase will average 5.8 per cent in the Eastern district and Pocahontas and Southern regions, and 4.2 per cent in the Western district. It went on to calculate that, with these additions, cumulative percentage increases since June 30, 1948, are as follows: Eastern district, 55.6 per cent; Pocahontas region, 47.1 per cent; Southern region, 52.6 per cent; Western district, 47.4 per cent; and United States, 51.7 per cent. "These estimates," the bureau explained, "are based upon the assumption that intrastate increases have and will follow the same pattern as the interstate."

Freight Work Done by Diesels

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The bureau set these figures up alongside others which compared the gross-ton-miles-per-train-hour performance in last year's first 10 months with that of the like 1940 period. The percentages by which the 1948 performance was better than that of 1940 were 7.7 per cent in the Eastern district, 8.3 per cent in the Pocahontas region, 23 per cent in the Southern region, and 26.2 per cent in the Western district. "However," the bureau said, "it should not be inferred from the foregoing that the improvement in freight train performance in 1948 over 1940 was due entirely to Diesel operations, although such operations were no doubt an important contributing factor to the overall improvement shown."

In the latter connection the bureau called attention to other figures in the article which compared gross-ton-mile-per train-hour performances of Diesel-electric and steam locomotives in the 1948 period. The country-wide average for Diesel-electrics was 64,905 as compared with 35,939 for steam locomotives. The territorial range of the Diesel figures was from 55,537 in the Eastern district to 71,854 in the Western district, no figure having been shown for the Pocahontas region because Diesel-electric operations there are "negligible." The range for steam locomotives was from 28,756 in the Southern region to 56,096 in the Pocahontas region.

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"In that year, the overall average gross ton-miles per train hour was 33,859, as compared with an average of 35,939 for steam locomotive trains in the same period of 1948, or an increase of 6.1 per cent. However, the 1948 average for all freight trains, including those hauled by Diesels, was 39,782, or 17.5 per cent above that of 1940. Attention is also called to the fact that for all classes of freight trains combined the average train load (net ton-miles per train-mile) increased from 850 tons in the 1940 period to 1,181 tons in 1948 or 39 per cent, while the average train speed declined but slightly from 16.7 to 16.1 miles per hour."

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Vapor OK-4625 steam generator as set up for display and test purposes at the Chicago plant

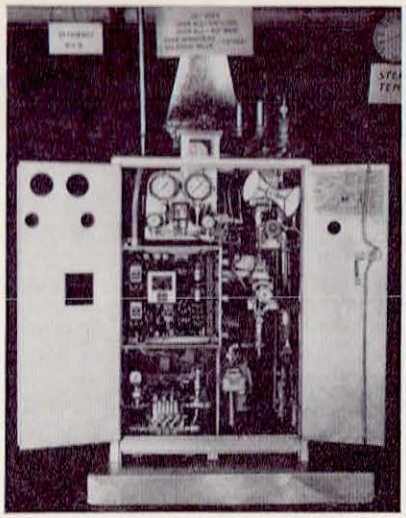
Utilizing Intensi-Fired combustion and various other improvements, this generator is said to produce 2,500 lb. of 99 per cent quality steam per hour at 81.2 per cent generator efficiency and with 20 per cent overload capacity. This is about twice the capacity of the present Vapor 1,600-lb. steam generator, but the floor space required is practically the same.

The relatively small size of this generator will permit installing dual units to secure a capacity of 5,000 lb. per hr. when required and give added reliability in service. The controls have been simplified and largely concentrated in a cabinet at the front of the generator for more convenient adjustment of controls and also for greater flexibility in locating the unit in the locomotive. This design permits full steam pressure to be obtained within two minutes from a cold start.

The basic construction of the Vapor OK-4625 unit is similar to that of previous models. It is a coil-type steam generator with patented stagger-coiled assemblies properly compensated for expansion and designed to split into narrow films the combustion gases which flow in opposite direction to the course of water through the coils. The heat release is 1,000,000 B.t.u. per cu. ft. of combustion space and the fire pot is air cooled to permit delivery of a large amount of heat from the burner nozzles. The small quantity of steam and water in the coils makes it practically impossible to have a steam explosion.

There are over 500 ft. of steel tubing with 170 sq. ft. of exterior surface in the inner, intermediate and outer coils of this generator. A fourth economizer coil with about 59 ft. of tubing and 15 sq. ft. of surface area has been added which is located in the path of the exhaust gases as they enter the stack and reduces stack temperature to about 550 deg. F., thus increasing the efficiency. This short coil, replaceable with comparative ease, takes the main internal oxidation attack of heated water at the inlet and eliminates the external corrosion formerly caused by acids resulting from contact of exhaust gases with sweating on the outer coil.

A more efficient and hotter fire for steam generation is secured by the Intensi-Fired combustion which consists mainly of offsetting the blower so that air enters the firepot in a tangential direction. This gives a swirling action which assures better mixing of fuel and air and also more rapid transfer of heat to the coils. This generator operates at a lower stack temperature and higher oil efficiency than previous Vapor models. The pump runs at 900 r.p.m., compared with 1,200 to 1,600 r.p.m. formerly required. The back pressure in the feedwater is reduced 20 per cent.



Control cabinet at the front of the steam generator with doors open to show interior equipment

The controls are arranged for maximum efficiency, self-drainage and availability. A single electric motor operates the fuel and water pumps, blower and ignition system. The Vapor-Servo control, hydraulically operated, properly proportions the air delivery and the oil with the amount of water needed to satisfy the steam demand. All valves are fitted with identifying handles, those normally closed being round and those open being cross-type.

The generator is protected against superheat by a steam-temperature limit control. An air transformer filters air to the fuel-nozzle line. An electric switch is built into the regulator for cycling the generator on when demand necessitates. The fire is adjusted to evaporate all but 10 per cent of water flowing through the coils. Sludge formed by water treatment settles to the bottom of a separator and is periodically blown to the ground.

The power consumption is minimized, being 2 amp. per 100 lb. of evaporation, total load. The motor is a motor converter which drives the blower, water pump, fuel pump and also has slip rings built in for the ignition transformer. The gauge panel is visible from all angles. Only one 75-volt electric bulb is needed to light the controls and gauges.

The electric control panel consists of two heavy-duty relays for starting and running sequence. An alarm relay and a time-delay relay are provided in case the fuel supply, air supply or ignition should fail. A resistor permits motor voltage adjustment to that used by various Diesel locomotive builders. The electric control panel is hinged so that it may be swung out of the way when removing the main motor and for greater accessibility in servicing.

FREIGHT WORK DONE BY DIESELS VARIES WIDELY

Range on large roads from 94.95 per cent of total to none shown in latest issue of I.C.C. bureau's "Monthly Comment"; other articles on working-capital position of Class I roads, shifts in preponderance of traffic by direction, and prospective yield from Ex Parte 168 interim freight-rate increase

Proportions of total freight-service gross ton-miles handled by Diesel-electric locomotives on 36 "large steam railways" during the first 10 months of 1948 ranged from 94.95 per cent on the Gulf, Mobile & Ohio to zero on the Illinois Central and Norfolk & Western. The comparison, covering railroads with 1947 operating revenues above $50 million, was made by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in the latest issue of its "Monthly Comment."

It was part of an article in which the bureau discussed the railroads' showing during last year's first 10 months as measured by "indicators of operating efficiency in freight service." Other articles covered the net working capital position of Class I roads as of October 31, 1948; shifts in the preponderance of rail traffic by direction; and the estimated yield from the freight rate increase authorized by the commission in its December 29, 1948, report on the interim-relief phase of the Ex Parte 168 proceeding.

The latter was given first place in the "Comment," and it put the over-all average increase at 5.2 per cent, as did the article reporting the decision in the *Railway Age* of January 8, page 242. Like the notice issued with the decision by I.C.C. Secretary W. P. Bartel, the "Comment" put the estimated annual yield at $425 million. By territories, it estimated that the increase will average 5.8 per cent in the Eastern district and Pocahontas and Southern regions, and 4.2 per cent in the Western district. It went on to calculate that, with these additions, cumulative percentage increases since June 30, 1948, are as follows: Eastern district, 55.6 per cent; Pocahontas region, 47.1 per cent; Southern region, 52.6 per cent; Western district, 47.4 per cent; and United States, 51.7 per cent. "These estimates," the bureau explained, "are based upon the assumption that intrastate increases have and will follow the same pattern as the interstate."

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period were, in turn, 9.39 per cent and 8.44 per cent.

Meanwhile, the increases over 1940 on the other 34 large roads ranged from 1.9 per cent for the Louisville & Nashville to 64.4 per cent for the G.M.&O., and only eight of the increases were less than 10 per cent. In the latter connection the bureau suggested that the increases of 8.5 per cent and 8.6 per cent shown by the Chesapeake & Ohio and N. & W., respectively, were "appreciable," because of "the nature of their traffic and operations."

Good Showings for Steam Locomotives

The bureau also noted that:

"Most of the roads which handled a considerable proportion of their freight traffic with Diesel locomotives in the 1948 period show rather large increases in the average number of gross ton-miles per train-hour over that of 1940 but the percentages of increase varied greatly. However, in the case of several roads which handled only small proportions or none of their traffic with Diesels the increases in the averages were also large. This is particularly true of the Delaware & Hudson; New York, Chicago & St. Louis; Illinois Central; and the Texas & New Orleans. The Gulf, Mobile & Ohio, which had the largest increase in the average number of gross ton-miles per train-hour (64.4 per cent), handled about 95 per cent of its traffic with Diesels. On the other hand, the Delaware & Hudson had the second largest increase in the average (60.9 per cent) but only 2.83 per cent of its gross ton-miles were produced by Diesels."

Of last year's showing generally this article noted that "significant operating averages reflecting freight-train performance . . . were all higher in the 1948 period than in 1947 or 1944 (the year of peak war traffic)." It added, however, that "two important indicators of equipment utilization, 'car miles per freight car day' and 'net ton-miles per freight car day,' were not as favorable as in 1944 or 1947."

The article on working capital presented figures showing that for Class I roads as a whole, the "quick assets" (cash and temporary cash investments) declined from $2,022.5 million as of October 31, 1947, to $2,004.7 as of October 31, 1948, a drop of 0.9 per cent. The decrease of $17.8 million was a composite of increases and decreases in the districts and regions as follows: Eastern district, increase of $70 million; Pocahontas region, decrease of $38.2 million; Southern region, increase of $47.9 million; Western district, decrease of $97.5 million. Much of the Western-district decrease was due to debt maturities liquidated late in 1947, the bureau explained.

On October 31 in both 1947 and 1948, the "quick assets" exceeded the current liabilities in the Southern region and Western district, although the percentages of coverage on the 1948 date were down, respectively, from 113.9 to 113.7 and from 124.2 to 101.7. On neither of the two dates did the "quick assets" of Eastern-district or Pocahontas-region roads equal their current liabilities. In the Pocahontas region the percentage of coverage dropped from 91.3 in 1947 to 56.9 in 1948; the Eastern-district percentage rose fractionally, from 79.1 to 80.

Meanwhile the "net corporate working capital" (total current assets less total current liabilities) for all Class I roads dropped from $1,696.8 million on October 31, 1947, to $1,624.3 million on the corresponding date in 1948, a decline of 4.3 per cent. The latter was the composite result of increases of 8.7 per cent in the Eastern district and 13.7 per cent in the Southern region and declines of 11.1 per cent in the Western district and 46.5 per cent in the Pocahontas region. The net working capital, excluding materials and supplies, for the roads as a whole dropped in the one-year period from $948.5 million to $788.8 million, or 16.8 per cent. Here again, however, the October 31, 1948, figures for the Eastern district and Southern region were higher than those of 1947, the respective increases being 8.7 per cent and 15.6 per cent. The decline in the Western district was 24.9 per cent while the Pocahontas roads, on October 31, 1948, had a net deficit of nearly $10 million for this item of net working capital, excluding materials and supplies. That compared with a black figure of $43,298,000 as of October 31, 1947.

The shifts in preponderance of rail traffic by direction were indicated by an analysis of data showing, for the years 1939 to 1947, inclusive, and the first 10 months of 1948, the per cent eastbound (including northbound) of total loaded freight car-miles. The bureau's comment on the data's showing included the following:

"In the years 1942-1944 war conditions accentuated the preponderance of eastbound traffic on railways in the East and South but during the years 1943-1945 the Western-district carriers were able to load formerly empty westbound cars to such an extent that the proportions of eastbound to total loaded car-miles dropped considerably below the pre-war level and reached a low point of 50.4 per cent for the period in the year 1945. In the post-war years . . . the percentages of eastbound traffic for the Eastern district and Southern region tended to hold at about the same or a somewhat lower level than in the pre-war years. For the Pocahontas roads, however, such percentages rose from 45.1 per cent in both 1939 and 1940 to 51.9 per cent in 1947, and dropped to 49.3 in the first 10 months of 1948. The proportion of eastbound traffic in the Western district dropped from over 57 per cent in 1939 and 1940 to 54 in 1946, and continued at 54.4 in both the year 1947 and the first 10 months of 1948."

One of five 4-6-4 locomotives with Franklin Type B rotary-cam poppet valve gears built for the Chesapeake & Ohio by Baldwin Locomotive Works

NEW AND IMPROVED PRODUCTS OF THE MANUFACTURERS

DUPLEX FUEL FILTER

A duplex filter, trade-named Micro-Klean, has been designed especially for Diesel-engine fuel service by the Cuno Engineering Corporation, Meriden, Conn. The filter has a special three-way changeover valve in the head, allowing operation of either half separately or both together, and is suitable for engines from 500 hp. to 2,000 hp.

Pipe connections are placed in the center of the unit so that the filter can be mounted on either the right or left side. Sufficient room is provided between inlet and outlet connections to swing a street elbow in one connection after a straight tube fitting is in place in the other.

The Cuno Micro-Klean duplex filter

ADJUSTABLE RAMP FOR LOADING DOCKS

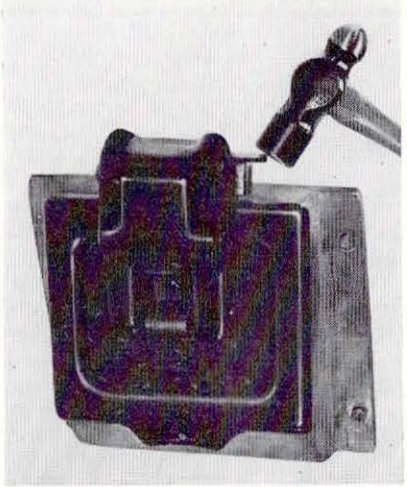
A movable loading ramp, designed to adjust to the varying heights of motor truck floors above or below dock level, has been introduced by the Rotary Lift Company, Memphis, Tenn. The device, known as "Leva-Dock," is a hinged platform, the movable end of which is normally flush with the front of the loading dock. A hydraulic jack beneath the platform permits its front end to be raised or lowered to compensate for the difference between the height of the dock and the truck bed. The gap between the Leva-Dock and the motor truck is bridged by a hinged throwover plate.

The Leva-Dock adjusts to the varying levels of motor truck floors

The hydraulic jack can be operated by air pressure or by an electric power unit. Controls for the air operation consist of an air-oil pressure tank, a hand-operated oil control valve, and an air valve.

After a truck is backed into position, the air and oil valves are opened, allowing the platform supporting arms to rest on the truck floor. While the oil valve is left open, the hydraulic system remains open, and the front of the platform will raise or lower automatically according to the load on the truck. When an electric power unit is used, a single valve, combining the functions of a motor starter, up-valve and lowering valve, achieves the same results as does air operation. The manufacturer states that a single power unit will operate as many as 10 Leva-Docks if they are located within a range of 60 ft. of the unit.

When the adjustable ramp is not in use, it is positioned level with the rest of the dock, permitting an uninterrupted flow of cross traffic.



In the final step in the installation of the Alcolid, the tab is bent over the square head of the assembly pin to lock the pin against longitudinal movement and to prevent rotation and elongation of the pin holes

LIFETIME JOURNAL BOX LID

Less out-of-service time for freight cars and substantial savings in maintenance costs are promised railroads by the use of a journal-box lid claimed by its manufacturer — American Locomotive Company's Railway Steel Spring Division, Latrobe, Pa. — never to need replacement. Known as the Alcolid and certified by the Association of American Railroads, this product is designed to prevent the entrance of impurities into the journal box allowed by loose or ill-fitting lids. There is no hood to come off, and no eyes to break off; pin-hole elongation or binding of the lug cam are said to be impossible.

Installation of the Alcolid can be made to new or old cars. It is per-

formed in three steps. The holes in the lid are alined with holes in the box, and the retaining pin is inserted. The second step is to push the lid down enough to put the spring under pressure and then withdraw the shipping pin, which is discarded. The third and final step is to push the lid all the way down and bend the flanged hood ear in place.

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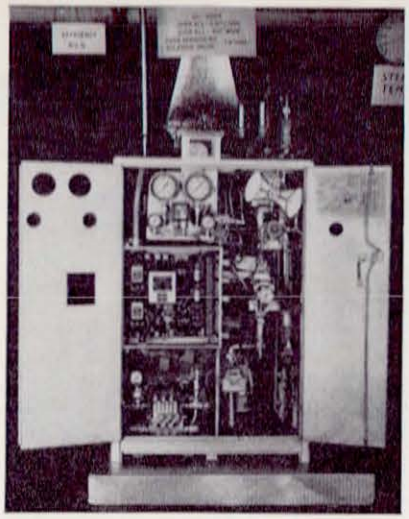

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GENERAL NEWS

Shippers "Set Home Signal" For Railroads, Says Faricy

Tells Atlantic Board better service requires more investment funds

"You are the men . . . who have the final say as to what sort of railroads you are to have—and you will decide it by the amount of your everyday use of transportation services," William T. Faricy, president of the Association of American Railroads, told the Atlantic States Shippers Advisory Board and the Traffic Club of New York at the board's silver anniversary dinner in New York on January 13.

Mr. Faricy, whose address highlighted the board's two-day meeting, first reviewed the physical and financial condition of the railroads in 1922, three and one-half years after the end of World War I, when "there was ample ground for pessimism as to what the future might hold." Pointing out that the picture today is "far better than the one which confronted the railroad man looking ahead from the same point of time after the first World War," Mr. Faricy ascribed the difference to research and invention and the investment of vast sums of money, to produce gains in efficiency, lower costs, better service and greater adequacy and dependability —benefits shared by all groups except "the investors whose funds made them possible."

"But the signals ahead," Mr. Faricy continued, "are not all clear. The first signal—the one at the entrance to the road to improvement—is clear green. It signals us that we enter on that road confident that efficiency will continue to step up. . . . that there will be continued improvement in railroad efficiency and service.

"But after the first green light, the next signal is one of caution. This signal has to do with inescapable costs." In this connection, Mr. Faricy stated that wages and payroll taxes, which together account for 61 per cent of all operating costs, are 86 per cent higher in 1949 than in 1939; that prices of materials, supplies and fuel, which absorb 30 per cent of all operating expenses, average 118 per cent higher today than before the war, and that taxes, the third largest item of expense, are 177 per cent greater than in 1939. "With no cushion of previous profits on which to fall back, the railroads have had to meet the rise in these elements of costs through handling a volume business at record efficiency, and through increases in rates," he said.

"To continue to handle business with ever greater efficiency," he added, "calls for continued investment and even enlarged investment in improved facilities —and there are caution signals ahead as to whether we can count on finding that increased investment. Railroad investment, like investment in the businesses of most of you, depends upon the prospect of earning reasonable profits. And the indications of the signals on that are not yet clear.

"In still another aspect, the signals ahead say caution—and the railroads are proceeding cautiously and only as necessity compels. This is in the matter of increasing freight rates to meet rising costs. The rise in the general level of prices began long before the increase in freight rates. . . . Today, with freight rates up 52 per cent, the level of commodity prices is up more than 100 per cent. . . . The ratio of freight rates to wholesale prices at destination of commodities transported by rail has been lower than any time since the I. C. C.'s Bureau of Transport Economics has been keeping figures on the subject."

"The railroad man can do much about determining the signals which indicate increasing efficiency and improving service, if the funds are available for investment in improvements. The railroad man can . . . at least propose a rate structure adequate to meet costs.

"But," Mr. Faricy concluded, "there is one more signal ahead—and that is not one the railroad man can control. The people who will really set the home signal will not be railroad men, or even the public regulatory bodies who control railroad rates. They will be the patrons of the railroads—their customers—and especially the men who direct the movement of the great tides of freight traffic of the country."

Shepherd Urges "Dynamic" Thinking

Warner B. Shepherd, of Pittsburgh, Pa., general traffic manager of the Aluminum Company of America, and president of the National Association of Shippers Advisory Boards, in an informal talk at the January 14 business meeting, urged all members of the board to use their contacts and influence to get people to thinking "dynamically, not statically," about the danger of socialization, "first of the railroads, and then of all other industry." He also warned that if shipper recommendations for the end of the so-called heavy loading orders are adopted, the shippers will have to prove by their subsequent actions that the recommendation was justified; and suggested that freight claim prevention meetings be enlarged to include more of the men "who actually load and handle cars."

C. R. Megee, vice-chairman of the Car Service Division of the Association of American Railroads, reported a net total 1948 gain in railroad car ownership of about 23,000 cars, mostly box and hopper cars. Mr. Megee added, however, that ownership of "urgently needed" gondolas and flat cars is about 10,000 less than a year ago, and that there has been a loss of "about 4,000" stock and refrigerator cars. With respect to 1949, he stated that "the growth in freight car population will at best be slow. . . . We cannot afford to be at all complacent about the car supply. . . . There will doubtless be shortages of certain types." At the same time, Mr. Megee emphasized that "Every effort is being made to improve the quality of service. . . . The railroads are not holding back on the necessary program of expansion."

Carloadings in the board's territory during the first three months of 1949 are expected to total 1,082,719, an increase of 0.8 per cent over actual load-

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ST. LOUIS AS A WORLD PORT ? ? ?

After days of delay due to low water in the Mississippi river; the sending of an army boat to dredge a channel; transferring in mid-stream 160 tons of its 900-ton cargo of scrap steel to lighten its load, the ship Angele Higgins, which left Cuba December 9, finally docked at the St. Louis wharf December 25.

The event has been hailed as marking the establishment of St. Louis as a "world port." So what! Has St. Louis been denied any of the products from the four corners of the world because of lack of transportation? No! Will the "man on the street" in St. Louis buy these products any cheaper simply because they arrive by boat? Again—No!

The shipping company is reported in the press as saying they hoped to establish a rate 10 per cent lower than rail. They may be able to do this if the channel is kept sufficiently deep at your—the taxpayers—expense, but what benefit will you get for your money? Will your new home be less costly because the steel scrap processed into finished product moved by boat instead of Mo. Pac. faster rail service New Orleans to St. Louis? You know the answer—It is NO.

—Missouri Pacific Lines "News Reel"

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ings for the first quarter of 1948. Car supply and operating conditions in the territory are generally good at this time, according to G. C. Randall, New York district manager of the A. A. R.'s Car Service Division.

R. F. Hogan, Philadelphia, Pa., traffic manager of the Warner Company and retiring president of the board, presided at the business sessions, while J. A. Quinlan, of New York, vice-president of the St. Regis Paper Company, and retiring executive committee chairman, acted as toastmaster at the silver anniversary dinner, which was attended by presidents or chief executives of most of the railroads in the board's territory. C. J. Goodyear, a past president of the board and of the National Association of Shippers Advisory Boards, reviewed the Atlantic Board's 25-year history at the dinner.

New officers of the board are: President, H. H. Pratt, New York, general traffic manager, Crucible Steel Company of America; vice-presidents, W. W. Weller, Newark, N. J., eastern zone traffic manager, Weyerhaeuser Sales Company, and R. E. Covey, Fredericksburg, Va., traffic manager, Sylvania division, American Viscose Corporation; and general secretary, C. B. Roeder, New York, general traffic manager, American Home Foods, Inc. Mr. Hogan becomes chairman of the executive committee.

Convention Program Announced by A.R.E.A.

March Golden Anniversary meeting to have many special features

A provisional program for its Golden Anniversary meeting, to be held at the Palmer House, Chicago, March 15-17, has been announced by the American Railway Engineering Association. This program shows marked deviation from usual practice, the purpose being to introduce special features commemorating the Association's fiftieth anniversary. The anniversary slogan, "A Past of Achievement—A Future of Opportunity," will be the central theme.

Through the holding of separate and concurrent sessions on two afternoons, additional time will be gained for presentation of special features. To add interest several of the committees will present special speakers on appropriate subjects relating to, but not included in, their assignments. The three forenoon sessions will be given over largely to outstanding speakers on subjects of general interest to railway engineers.

Two evening sessions will be held. The Tuesday evening session will be designed to appeal to women as well as to men, and women will be invited to attend. The Golden Anniversary banquet will be held on Wednesday evening. Acting jointly, the A.R.E.A. and the National Railway Appliances Association will present an exhibit of photographs and drawings in the foyer of the Palmer House depicting the progress of railway engineering during the last half century.

The provisional program follows:

TUESDAY, MARCH 15

Morning, Grand Ballroom

Address by C. H. Mottier, president
Report by secretary
Address by Max Ruppert, president, N.R.A.A.
Address by J. H. Aydelott, vice-president, Association of American Railroads
Address by Ralph Budd, president, Burlington Lines
Address by H. T. Heald, president, Illinois Institute of Technology

Afternoon, Grand Ballroom

Report of committees
Roadway and Ballast
Address on Roadbed Solidification, by Rockwell Smith, roadway engineer, A.A.R.
Ties
Address on The Future of Timber Supply, by C. D. Turley, engineer of ties and treatment, Illinois Central
Economics of Railway Location and Operation
Maintenance of Way Work Equipment
Economics of Railway Labor

Afternoon, Red Lacquer Room

Reports of committees
Iron and Steel Structures
Address on the Future of Structural Engineering in Relation to Railroad Bridges, by Shortridge Hardesty, consulting engineer
Impact and Bridge Stresses
Address on What We Know About Impact, by A. B. Chapman, assistant chief engineer, Chicago, Milwaukee, St. Paul & Pacific
Uniform General Contract Forms
Waterproofing
Wood Bridges and Trestles
Clearances
Masonry
Address on The Repair of Concrete Masonry, by A. N. Laird, chief engineer, Grand Trunk Western

Evening, Grand Ballroom

The Achievements of the A.R.E.A., by H. R. Clarke, chief engineer, Burlington Lines
Entertainment—Details to be announced later
Motion picture—"Wheels A'Rolling"

WEDNESDAY, MARCH 16

Morning, Grand Ballroom

Presentation and approval of manual material
Addresses as follows:
The Effect of Diesel Operation on Fixed Property of American Railroads, by J. B. Akers, chief engineer, Southern System
Investigation of the Relation Between Track and Equipment, by I. R. Jackson, mechanical engineer, Mechanical Division, A.A.R.
Future of Soil Mechanics in Railroading, by Dr. R. B. Peck, research professor of soil mechanics, University of Illinois
How Can the Railroad Construction and Maintenance Engineer Best Meet Increasing Cost of Labor and Material?
By Heavier Rail—F. R. Layng, consulting engineer, Bessemer & Lake Erie
By Increased Mechanization—S. R. Hursh, assistant chief engineer-maintenance, Pennsylvania
By Roadbed Stabilization—T. A. Blair, chief engineer system, Atchison Topeka & Santa Fe

Afternoon, Grand Ball Room

Reports of committees
Wood Preservation
Address on Recent Developments in Preservation Treatment, by Dr. Hermann von Schrenk, consulting timber engineer
Track
Rail

Afternoon, Red Lacquer Room

Reports of committees
Yards and Terminals
Records and Accounts
Buildings
Water Service
Address on Recent Developments in Water Treatment, by R. C. Bardwell, superintendent water supply, Chesapeake & Ohio

Evening, Anniversary Banquet

Address by W. T. Faricy, president, A.A.R.

THURSDAY, MARCH 17

Morning

Reports of committees
Highways
Address on Grade Crossing Protection, by W. J. Hedley, assistant chief engineer, Wabash
Cooperative Relations with Universities
Presentation and approval of manual material
Address on The Future of Research on American Railroads, by G. M. Magee, research engineer, A.A.R.
Address on The Future Opportunities of the A.R.E.A., by E. M. Hastings, chief engineer, Richmond, Fredericksburg & Potomac
Installation of officers
Adjournment.

Aid to Transport a Government "Responsibility," Truman says

Claiming for the Federal government "a major responsibility in the development and regulation of the vital transportation and communication industries," President Truman told Congress last week that the government "must continue . . . where necessary" to provide "direct or indirect assistance to most segments of these industries." The statement was made in that part of the President's annual budget message which called for continued spending of public funds in the fields of highway, air and water transportation.

The fiscal 1950 appropriations proposed in the budget for such spending,

A. & W. P. MAKES CASH PAYMENT TO FIREMAN ACCUSED OF DRUNKENNESS

S. R. Young, president and general manager of the Atlanta & West Point, announced on January 17 that he had agreed to make a compromise cash payment to settle the widely publicized "fully-drunk, full pay" case, wherein a fireman accused of being intoxicated allegedly took the operation of a locomotive away from the engineman at the point of a knife. Mr. Young, who is also president and general manager of the Western of Alabama, and general manager of the Georgia, said that the amount given the fireman was "substantially less than one half" of the $12,000 back pay which the National Adjustment Board ordered paid to the employee. As part of the agreement, the fireman waived all claims against the railroad and acknowledged his discharge from the company as of November 7, 1945.

As was pointed out in the *Railway Age* editorial of October 23, 1948, the board also decided that the employee must be reinstated in the job from which he was dismissed. Mr. Young's refusal either to rehire the fireman, or to repay him three years' back salary, prompted the Brotherhood of Locomotive Firemen & Enginemen and three other operating unions to threaten a strike against the 600 mi. of line comprising the three roads under Mr. Young's jurisdiction. Mr. Young said he understood that the unions had been planning to circulate a strike ballot covering not only the case at hand, but many unrelated past "grievances" as well, in the hope of obtaining a favorable vote. Many union members, he added, were unwilling to vote a strike on the fireman's case alone.

as well as those for the Interstate Commerce Commission, Railroad Retirement Board, and National Mediation Board, were reported in last week's *Railway Age*. The entire budget set out proposed appropriations totaling $41,858 million and estimated receipts totaling $40,985 million, thus indicating a deficit of $873 million. This the President would more than offset by new taxes calculated to raise $4 billion annually—principally higher corporate taxes, his state-of-the-union message said.

The President's discussion of the proposed spending for transport facilities came in the "Transportation and Communication" section of the budget message. After making the assertions noted above, Mr. Truman continued to say that a "major part" of federal expenditures for transportation and communication "are for basic facilities such as highways, airports, waterway improvements, and navigation aids." He added: "As post-war programs have developed, expenditures for such facilities have increased considerably in recent years. By fiscal year 1950, most of these programs will reach a level which is likely to be sustained with relatively little change in the near future."

As to the postal service, the President referred to the "large postal deficits," resulting from "record volume" of business, "most of which is carried at rates which do not cover handling costs." The "low rates" for parcel post, he added, "have led to a substantial diversion of express traffic from common carriers, with the result that the Post Office Department is now receiving a volume and type of parcel business which it cannot efficiently handle with existing facilities." The President has asked the Postmaster General to propose rate adjustments under which postal operations would be on a "self-sufficient" basis, and the only "remaining deficit would represent largely the costs of government penalty mail, franked mail, air-line subsidies, and other costs not properly chargeable to the users of the postal service."

Mr. Truman called commercial aviation "the newest of our transportation industries," and he said that it is "still in a stage of development that requires subsidy assistance." He added, however, that "the program of the Civil Aeronautics Administration for modernizing the nation's airways will assist the air lines in achieving greater safety and regularity, higher load factors, and thus eventually in reducing their dependence upon federal financial aid."

Although he had recommended approval of the St. Lawrence agreement in his state-of-the-union message and in his annual economic report, the President again, in the budget message, urged Congress to give "early approval" to this seaway and power project. "The navigational aspects," he said, "have recently assumed an increased importance as a result of the prospects for developing high-grade iron ore deposits in Labrador. As our domestic deposits become depleted, the proposed seaway will become an important link between our steel industry and this new potential source of ore. Furthermore, this dual-purpose project is needed as a source of low-cost power."

The foregoing was part of the message's discussion of "water transportation" where the President had previously referred to the fiscal 1950 rivers and harbors program as one which contemplates new construction only on projects "of high urgency." There also came a recommendation calling for legislation to increase the authorized capital stock of the Inland Waterways Corporation. This would pave the way for the provision of additional government funds for that enterprise, the financial plight of which is noted elsewhere in this issue.

"The Inland Waterways Corporation, which helps bring the advantages of water transportation to shippers, large and small, urgently needs additional capital to modernize its equipment," the President said. "Such rehabilitation should enable the corporation to demonstrate the prospects for profitable operation of its services, and permit the sale of the corporation to a private operator at terms which would safeguard the interests of both the government and the users of the service. I recommend that the Congress authorize the additional capital funds needed."

As to highways, the President said that the appropriations proposed for fiscal 1950 "will be close to the level au-

RAILROAD MUST COMPETE, EVEN AT LOSS, WITH 2-CENT CITY BUSSES, COMMISSIONER SAYS

So long as a railroad company continues in business, it has a "positive duty" to "render a service adequate and in all respects just and reasonable," even under conditions "against which no private company can long compete, or possibly even endure" and even though it "might ultimately be forced to abandon operations," in the opinion of New York State Public Service Commissioner George A. Arkwright.

Commissioner Arkwright's opinion was submitted to the New York commission as part of a recommendation that the Staten Island Rapid Transit (operated by the Baltimore & Ohio) be required to restore many of the trains which it discontinued last September after fare reductions on competitive city-owned bus lines — which reportedly operate at a deficit—had cut heavily into the railroad's traffic.

Prior to September, the S.I.R.T. operated trains at frequent intervals—every 10 minutes during certain hours—on three electrified lines from St. George, the Staten Island terminal for ferries from other parts of New York City, to Tottenville, South Beach and Arlington. Its lines are paralleled nearly everywhere, and crossed at many points, by municipally owned and operated bus routes. On July 1, 1948, the bus lines put into effect a straight 7-cent fare, and, jointly with the New York subway system, a combined fare of 12 cents, which, in effect, brings the bus fare down to 2 cents for any passenger who uses the Staten Island busses and the New York subways in the course of a single trip. Before July 1, bus fares had been on a zone basis, with a possible maximum of 20 cents for the bus trip alone, plus the regular 10-cent New York subway fare. The rapid transit fare for the maximum distance from Tottenville to St. George is 32 cents one-way and about 14 cents commutation, or roughly one cent per mile; in either case, if a subway is used to complete the journey the regular 10-cent fare must be paid in addition.

Since the new fares went into effect, the number of bus passengers has increased about 25 per cent, and the number of rail passengers has dropped sharply. To offset the resulting revenue loss, the railroad reduced its service by about 50 per cent, subsequently, however, restoring some trains at the commission's request.

Commissioner Arkwright's recommendation, which calls for restoration of additional trains, was part of an opinion submitted to the full commission after hearings at which the S.I.R.T., the bus lines and the public were represented. In his opinion, Mr. Arkwright says:

"The major cause of the decline in service is undoubtedly due to omnibus competition, at rates and with facilities, against which no private company can long compete, or possibly even endure.

"No matter, however, what the cause of decline . . . (the company) must render a service adequate and in all respects just and reasonable . . . This duty is a positive duty."

"It may be that the company . . . caught in such a vicious cycle, might ultimately be forced to abandon operations."

In commenting on the opinion, Commission Chairman Milo R. Maltbie, with Commissioners Neal Brewster and Spencer B. Eddy concurring, said: "As an experiment to ascertain whether the proposed changes will improve the service without adding such an additional burden that the company cannot pay operating expenses on its passenger service is a serious question. The company's traffic has been reduced very greatly due to the competition of the city bus lines which are rendering service at very low rates which are said to be unremunerative. Any company which cannot pay its out-of-pocket expenses after attempts at a formation of schedules and of operating economies to pay out-of-pocket costs cannot be expected to continue rendering adequate service."

The proceeding is being kept for "further proof."

thorized in existing legislation." He added that "even with this high level of federal aid, our highways are not being improved as fast as they wear out, nor are they being modernized to the extent required by post-war traffic conditions."

C. & E. I. Plans a Year of Centennial Celebrations

At noon on January 2, all trains of the Chicago & Eastern Illinois sounded their whistles in a sustained 30-second blast to mark the beginning of a year of centennial festivities. Chartered on January 2, 1849, as the Evansville & Illinois, the road plans to hold special anniversary events throughout the year in Chicago and at various points on the line. "A century of service" will be the theme of its exhibit at the 1949 Railroad Fair.

The original segment was chartered by the Indiana state legislature to construct a line from Evansville to Vincennes, 53 mi. Today it operates nearly 1,000 mi. of track between Chicago, St. Louis, Mo., Thebes, Ill., and Evansville, Ind., and serves the south and southeast through connecting lines.

The C. & E. I. claims to have been the first railroad to install automatic train control (1914); to install Mars oscillating signal lights on the rear of all passenger trains (1946); to institute one-night passenger service between Chicago and Miami, Fla. (1936); to operate an all-coach streamliner between Chicago and Miami (1940); to operate an entire car in regular lounge car service for overnight travel (1906), and to promote a victory garden program along the company's right-of-way during the war (1942). In addition, the company claims to be the first midwest railroad to popularize Florida as a vacationland, having inaugurated service to the south in 1885 and a through train to St. Augustine in 1902.

During its 100 years of growth, the C. & E. I. has absorbed a total of 25 small roads. It received its present name on August 28, 1877.

The original line from Evansville to Vincennes was completed in 1853, and subsequent growth was north to Chicago, southwest from Danville, Ill., to southern Illinois, and southwest from Woodlawn Junction to St. Louis. The road first entered Chicago 77 years ago with the completion of a line from Dolton, Ill., on January 1, 1872. It reached its southern Illinois terminus at Thebes in 1900, and in 1904, through a trackage agreement with the Cleveland, Cincinnati, Chicago & St. Louis, extended its service to St. Louis.

1948 Was Big Year For Trucking Industry

"The most outstanding development in the trucking industry during 1948 was the steady, almost spectacular, growth of the industry both in terms of tonnage and vehicles operated," H. D. Horton, president of American Trucking Associations, said in his year-end statement. Mr. Horton put the total number of trucks now in operation at about 7,000,000 as compared with 6,500,000 at the end of 1947; and he referred to the "steady growth in tonnage moved by truck" last year.

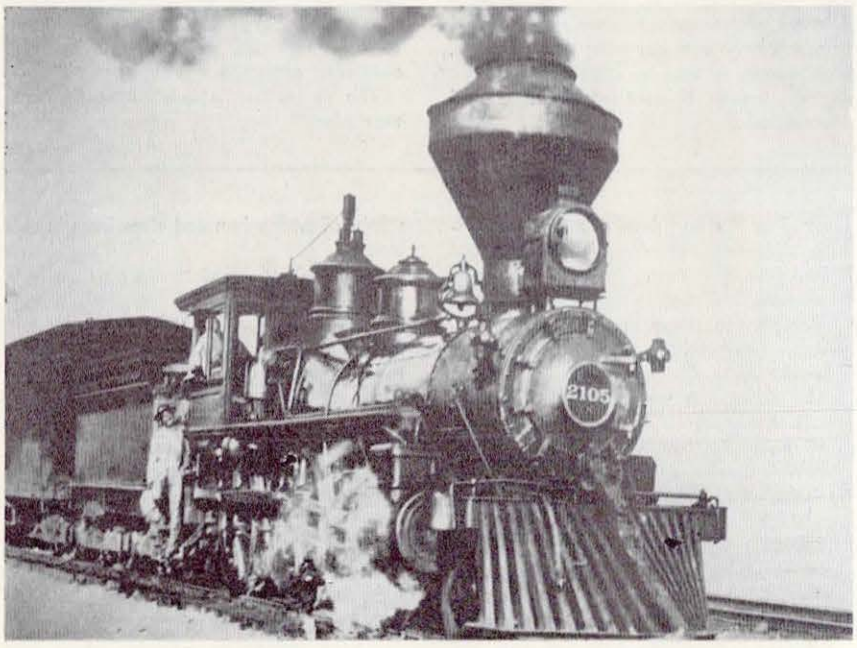
In the latter connection, he noted that A.T.A.'s truck loading index, which is based on the 1938-40 traffic of the reporting carriers, "climbed to 229 for the first 10 months of 1948, as compared with a 1947 index of 206. On the basis of these figures, Mr. Horton said that "a record index was assured" for last year's 12 months.

The trucking industry's "serious and continuing problems," as listed by the A.T.A. president, include "safety, construction of new highways and attendant taxation to cover their cost, and city traffic congestion." The problem of new highway construction was called "serious" because of "the unquestioned need for some new road building," and because of "the many grandiose plans for super-highway construction that have been proposed in several states."

"Many of the proposals," Mr. Horton continued, "are based on dreams of an ideal highway network to handle not only today's traffic but any conceivable increase in the future . . . A.T.A. has adopted a platform which calls for long-range highway planning based on actual needs and giving full consideration to the taxpayer's ability to pay the cost without being saddled with burdensome tax bills."

As to urban traffic congestion, Mr. Horton said the trucking industry was convinced that this problem would not be solved by the construction of "express ways that by-pass the congested business areas of our larger cities." The industry, he added, favors a program to provide off-street loading facilities for trucks serving congested business districts; and it "strongly" recommends that new business establishments be located "as far from the congested districts as possible."

"Traffic congestion," Mr. Horton said, "is a problem that requires the cooperative efforts of all of us—truck and bus operators, railroads, air lines, and water carriers, since their tonnage, in the main, moves at one time or another by truck; and producers, wholesalers, retailers, and consumers, all of whom pay a share of the increased costs that result from tie-ups in city traffic."



This early locomotive operated over the lines of what is now the Chicago & Eastern Illinois, which is celebrating its centennial this year

November Truck Traffic

Motor carriers reporting to American Trucking Associations transported in November, 1948, a total of 2,955,292 tons of freight, a decrease of 4.7 per cent below the previous month's total of 3,100,182 tons, but an increase of 13.4 per cent above the 2,606,875 tons hauled in November, 1947. The A.T.A. index number, based on the 1938-40 average monthly tonnage of the reporting carriers, was 238 in November as compared with October's 255. The November figures, according to A.T.A., are based on comparable reports from 286 carriers in 45 states.

U. P. Distributes 25,000 Copies Of "Old Oregon Trail" Booklet

A new 100-page illustrated booklet portraying life a century ago on the trail to Oregon is now being distributed by the Union Pacific, whose lines either coincide with or closely parallel vir-

tually all of the old trail. The pamphlet is entitled "Old Oregon Trail, Roadway of American Home Builders" and is sponsored by the American Pioneer Trails Association, Inc. Its publication serves to commemorate the 100th anniversary of admission into the Union in 1848 of the Oregon Territory.

The U. P. is sending some 25,000 copies of the booklet to grade schools in the 11 western states which it serves, libraries throughout the country, agents and representatives of the railroad, and selected schools in several midwestern states. Each copy is accompanied by a colored map showing the "Old Oregon Trail" and its branches.

A LITTLE FOR FREIGHT CARS, MAYBE?

Total 1948 steel production in the United States exceeded 88,000,000 tons—more than ever before in peacetime; and the country's total steelmaking capacity now stands at 96,000,000 tons per year—more than ever before in either war or peace. New facilities now under construction will add another 2,000,000 tons or more by the end of the present year.

President Would Dump More Money into Barge Lines

Purchase by the government of an additional $1,000,000 of capital stock of the Inland Waterways Corporation, operator of the Federal Barge Lines, is proposed in the fiscal 1950 budget which President Truman submitted to Congress on January 10. The proposed outlay would follow upon the expenditure of $2,000,000 for the same purpose made during the current fiscal year.

It would also take up the last of I.W.C.'s authorized capital stock, bringing the government's investment therein to a total of $15,000,000. In that connection, however, the budget statement said that legislation would be requested (as it was in the President's budget message) to increase the capital-stock authorization to provide funds "for a minimum rehabilitation program," and that "an appropriation of $2,000,000 will be required in fiscal year 1950 to begin the program." Such legislation, as well as proposals to expand I.W.C. operations, was among that proposed in bills already introduced in the new Congress.

Meanwhile, the additional $1,000,000, which the budget would give the Department of Commerce for purchase of the remaining I.W.C. stock now authorized, would be reserved by I.W.C. "for working capital requirements to meet the anticipated loss of $2,315,000 in 1950." The corporation has been incurring deficits for several years; but it was formerly able to finance them by selling its holdings of government securities. During fiscal 1948, it sold such securities in the amount of $2,238,060, and its financing plans for the current fiscal year contemplate that its last $50,000 of them will also be liquidated.

The corporation's estimated loss of $2,315,000 for fiscal 1950 compares with an estimated loss of $1,606,500 for the current fiscal year. When the fiscal 1949 budget was submitted a year ago, I.W.C. estimated that it would have a net income of $1,145,300 for the current fiscal year—if it received the $3,000,000 of new capital which was recommended in that budget. As noted above, it did receive $2,000,000. Last year's budget also estimated that the fiscal 1948 deficit would be only $825,900, whereas the "actual" figures in the present budget show that the deficit for that year was $2,308,401.

This showing was attributed to increases in operating costs and prices of supplies which more than offset a "small increase" in tonnage handled and increases in rates when railroad rates were advanced. Fiscal 1948 transportation revenues totaled $7,134,367, compared with $6,519,279 in fiscal 1947. Transportation expenses amounted to $6,929,273 and $5,765,202, respectively. "Total income" for fiscal 1948 amounted to $8,296,626, while "total expenses" amounted to $10,605,027.

Estimates for the current fiscal year

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS IN THE UNITED STATES

Compiled from 127 reports (Form IBS) representing 131 steam railways
(Switching and Terminal Companies Not Included)

United States

Income Items	For month of September 1948	For month of September 1947	For the nine months of 1948	For the nine months of 1947
1. Net railway operating income	$110,848,571	$48,314,729	$742,747,816	$559,853,247
2. Other income	16,421,306	14,196,628	158,385,748	143,495,996
3. Total income	127,269,877	62,511,357	901,133,564	703,349,243
4. Miscellaneous deductions from income	5,524,505	3,295,215	49,381,289	31,715,101
5. Income available for fixed charges	121,745,372	59,216,142	851,752,275	671,634,142
6. Fixed charges:				
6-01. Rent for leased roads and equipment	11,690,716	10,062,328	99,354,904	91,869,507
6-02. Interest deductions[1]	24,209,294	25,645,180	217,505,845	233,572,162
6-03. Other deductions	169,838	166,355	1,368,027	1,346,067
6-04. Total fixed charges	36,069,838	35,873,863	318,228,776	326,787,736
7. Income after fixed charges	85,675,534	23,342,279	533,523,499	344,846,406
8. Other deductions	3,018,655	2,190,164	28,962,912	25,190,107
9. Net income	82,656,879	21,152,115	504,560,587	319,656,299
10. Depreciation (Way and structures and Equipment)	31,816,226	29,494,033	278,261,798	263,847,148
11. Amortization of defense projects	1,344,086	1,336,915	12,622,929	12,164,480
12. Federal income taxes	50,287,614	20,381,450	321,958,885	216,542,185
13. Dividend appropriations:				
13-01. On common stock	17,769,139	9,676,324	124,853,166	101,007,569
13-02. On preferred stock	2,935,405	1,189,238	42,211,221	29,118,538
Ratio of income to fixed charges (Item 5 ÷ 6—04)	3.38	1.65	2.68	2.06

United States

Selected Expenditures and Asset Items	Balance at end of September 1948	Balance at end of September 1947
17. Expenditures (gross) for additions and betterments—Road	$240,870,060	$201,539,034
18. Expenditures (gross) for additions and betterments—Equipment	631,308,572	361,662,010
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	536,969,461	570,018,784
20. Other unadjusted debits	149,494,545	188,893,748
21. Cash	914,324,810	979,756,854
22. Temporary cash investments	1,025,210,313	1,002,066,871
23. Special deposits	117,425,754	144,586,033
24. Loans and bills receivable	13,008,706	11,892,528
25. Traffic and car-service balances—Dr.	58,872,093	48,867,608
26. Net balance receivable from agents and conductors	140,000,376	131,487,975
27. Miscellaneous accounts receivable	364,237,078	280,935,495
28. Materials and supplies	834,450,217	742,744,773
29. Interest and dividends receivable	19,283,415	17,487,673
30. Accrued accounts receivable	184,095,527	170,560,207
31. Other current assets	36,010,247	35,869,952
32. Total current assets (items 21 to 31)	3,706,918,536	3,566,246,969
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$146,524,278	$127,104,042
41. Loans and bills payable[3]	3,150,000	5,640,000
42. Traffic and car-service balances—Cr.	98,443,786	81,805,737
43. Audited accounts and wages payable	540,100,026	497,188,518
44. Miscellaneous accounts payable	256,371,059	224,717,189
45. Interest matured unpaid	41,896,606	47,703,114
46. Dividends matured unpaid	20,924,105	16,687,251
47. Unmatured interest accrued	73,778,742	65,666,504
48. Unmatured dividends declared	22,834,485	13,884,587
49. Accrued accounts payable	182,506,812	173,077,190
50. Taxes accrued	748,259,152	632,217,456
51. Other current liabilities	97,970,376	92,502,338
52. Total current liabilities (items 41 to 51)	2,086,235,149	1,851,089,884
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes	570,376,039	470,001,731
53-02. Other than U. S. Government taxes	177,883,113	162,215,725
54. Other unadjusted credits	299,885,308	338,835,601

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to Revision.

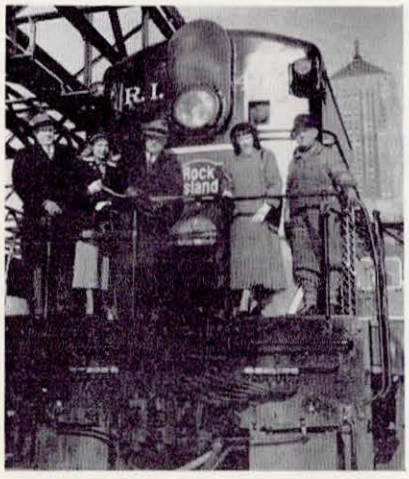
put the "total income" at $9,113,800 and "total expenses" at $10,720,300. The estimates for fiscal 1950 are $9,096,500 and $11,412,000, respectively. The financial statements show that the deficit in the corporation's "earned surplus" account is expected to total $18,461,770 at the close of fiscal 1950.

Canadian Roads Receive Triple Setback in Rate Increase Plea

Initial hearings before the Board of Transport Commissioners at Ottawa, Ont., last week on the long-pending application of Canadian railroads for a 20 per cent increase in freight rates resulted in a triple setback for the roads.

The first was the board's refusal to consider an immediate interim rate increase; the second was a board order suspending, pending hearings, rate increases put into effect last month on farm implements from eastern to western Canada; and the third was the board's ruling that the carriers should present evidence to justify the 21 per cent freight-rate increase awarded them last spring before evidence against that increase is presented by the seven provinces (all except Ontario and Quebec) which are protesting it.

As reported on page 256 of *Railway Age* for January 8, protests of these seven provinces against the 1948 increase have led to the appointment of a Royal Commission to study Canadian transportation problems; and also to



ROCK ISLAND INAUGURATES DIESEL SUBURBAN SERVICE—Effective early in January, the Chicago, Rock Island & Pacific placed two Fairbanks-Morse 1,500-hp. Diesel-electric locomotives in suburban service between Chicago and Joliet. These, together with 10 additional units under construction by the Electro-Motive Division of General Motors Corporation, will replace 19 steam locomotives now in this service. On the footboard prior to the first run are, left to right, V. H. Petersen, manager, railroad division, Fairbanks, Morse & Co.; Lee Mathison, commuter; J. D. Farrington, president of the Rock Island; Fran Hill, commuter, and Walter Saver, engineman

MAY ARBITRATE ON SECOND ENGINEER FOR DIESELS; MORE "NON-OP" TALKS

The National Mediation Board, on January 14, proffered arbitration in the dispute between 14 western carriers and the Brotherhood of Locomotive Engineers concerning the latter's demand for assignment of a second engineer to all multiple-unit road Diesel locomotives (see *Railway Age* of December 4, 1948, page 60). The arbitration offer followed a series of mediation meetings during which Francis A. O'Neill, Jr., board member, attempted to bring the two parties into accord.

It is understood that the engineers have agreed to the arbitration proposal, while the railroads were expected to accept or reject the offer later this week. The decision in the dispute will affect some 58 additional railroads, which have been served with similar demands.

Meanwhile, representatives of the railroads and of the 16 non-operating unions continued their talks at Chicago, using the recent emergency board report as the basis of discussions (see *Railway Age* of December 25, 1948, page 44).

an order from the federal cabinet to the transport board to review the formula on which that increase was based, and to apply to any further increase any revision in that formula which the board may find necessary.

The railroads had requested that the board give immediate consideration to an emergency interim increase, leaving until later any consideration of formula revision. In an attempt to have the board do so, they dropped their interim increase request from 15 to 10 per cent to avert "controversy," declaring, however, that 10 per cent would be far from adequate. The protesting provinces opposed continuation of the hearings on even the 10 per cent basis without relation to formula revision, and the board supported that view.

The net effect appears to be that the validity of last year's 21 per cent increase (reduced by exceptions to about 15 per cent) and the additional increases now proposed (10 per cent interim and 20 per cent permanent) will be fought out concurrently; also that the date on which the roads may expect any rate relief will be considerably delayed.

The roads contend that the benefits of last year's increase were more than wiped out by a subsequent wage increase. Although their 1948 traffic was the highest ever recorded, expenses increased more than revenues.

C. E. Jefferson, general traffic manager of the Canadian Pacific, has estimated that his company's freight traffic may increase 5.4 per cent in 1949 as compared with 1948. He anticipates major increases in movement of oil and oil products from the new Alberta oil fields; wood pulp; fruits and vegetables, and grain and grain products. His "very optimistic" estimate would mean an increase of about $36 million in gross revenues on the basis of present rates; he points out, however, that both traffic and revenues could be reduced by any business recession

F. R. P. Moves to Washington

"To bring its activities and influence closer to the center of national government," the Federation for Railway Progress has moved its headquarters from Cleveland, Ohio, to Washington, D. C., where it will occupy the building at 1430 K street, N. W. This building, to be known as the Railway Progress building, will house the federation's executive offices, its Passenger Relations Department, its Shippers' Service Bureau and the editorial offices of its monthly magazine, "Railway Progress."

Thomas J. Deegan, Jr., president of the federation, in announcing the move, said: "Washington is the frontier city in the fight to fend off socialization of our railroads. The federation is dedicated to this battle against government ownership.

"Washington governs almost every move the railroads make. Being on the scene, we shall be able to do a more effective job in our efforts to secure more reasonable treatment of the railroad industry by the government. And more important, it will enable us more effectively to promote the best interests of railroad investors, shippers, suppliers, workers and the traveling public through an unfettered viewpoint."

Johnson Reappointed to I.C.C.; Many Candidates for Barnard Post

President Truman has sent to the Senate his nomination of J. Monroe Johnson for a new seven-year term as a member of the Interstate Commerce Commission. Colonel Johnson, who is also director of the Office of Defense Transportation, has been a member of the commission since May, 1940; and the new term for which he has been nominated would expire December 31, 1955.

Since May 5, 1948, when he reached the age of 70 years, Colonel Johnson has been serving pursuant to a Presidential order which exempted him from the civil service rule requiring government employees to retire at that age. Presumably President Truman will issue another order extending this exemption if the colonel's reappointment is confirmed by the Senate, as is expected.

Meanwhile, many names have been mentioned in connection with the commission vacancy which was created by the recent death of the late Commissioner George M. Barnard. Among those proposed for the position are Mrs. Grace Coolidge, widow of the late President Calvin Coolidge; C. L. Meins, chairman of Boston's Metropolitan Transit Authority; John S. Cooper, former senator from Kentucky; E. M.

Reidy, assistant chief counsel of the commission; H. A. Hollopeter, transportation director, Indiana State Chamber of Commerce; Arne C. Wiprud, former chief of the Transportation Section, Anti-Trust Division, Department of Justice, who is now associate solicitor for the Post Office Department in the railroad mail-pay case; C. E. Childe, former member of the defunct Board of Investigation and Research; and David O. Mathews, chief of the Transportation Rate Unit, Anti-Trust Division, Department of Justice.

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equipment, at New York, reporting to **E. P. Moses,** engineer, car equipment. **G. B. Wakeley,** assistant equipment electrical engineer, has been appointed assistant engineer, electrical equipment, at New York, reporting to **W. S. H. Hamilton,** engineer, electrical equipment. **M. S. Riegel,** assistant engineer, tests, will retain that title and report to **W. F. Collins,** engineer, tests. **A. J. Serieno** has been appointed assistant engineer, brake equipment, at New York, reporting to **L. D. Hays,** engineer, brake equipment.

E. J. Haley, Jr., roundhouse foreman of the Atlantic Coast Line at Rocky Mount, N. C., has been appointed general mechanical inspector at Wilmington, N. C.

H. G. Comrie, general boiler inspector for the Prairie and Pacific regions of the Canadian Pacific, with headquarters at Winnipeg, Man., retired on December 31. He is succeeded by **H. E. Gregory,** assistant general boiler inspector at Calgary, Alta.

PURCHASES & STORES

J. H. Lauderdale, whose retirement as general purchasing agent of the Missouri Pacific Lines at St. Louis, Mo., was reported in the *Railway Age* of January 1, was born on December 21, 1878, at Dyersburg, Tenn., and was graduated by the University of Kentucky. He began his railway career with the St. Louis-San Francisco as a clerk in the freight station at Memphis, Tenn., and two years later joined the Tennessee Central in the office of the vice-president and general manager at

J. H. Lauderdale

Nashville, Tenn. In 1905 he was employed by the Gulf Coast Lines (part of M. P.), then under construction, as assistant to the vice-president and general manager, and was subsequently advanced to purchasing agent. During World War I he left that post to serve with the United States Railroad Administration—first as a member of the forest products committee, and later as assistant manager in charge of liquidating material and supply department claims. He returned to the Gulf Coast Lines in 1924 as general purchasing agent of the International-Great Northern at Houston, Tex. The next year he was appointed general purchasing agent for the Texas and Louisiana properties of the M. P. Mr. Lauderdale was transferred to St. Louis in 1933 as general purchasing agent for the entire M. P. system.

Clarence S. Burt, whose appointment as assistant to the director of purchases and stores for the Illinois Central at Chicago was reported in the *Railway Age* of December 25, 1948, is a native of Oakland, Miss. He was educated at Millsaps College, Jackson, Miss., and Mississippi State College, Starkville. He began his railway career with the I. C. in April, 1919, as a

Clarence S. Burt

treatment inspector in cross tie service at Grenada, Miss., and was subsequently stationed at Carbondale, Ill., New Orleans, La., Hattiesburg, Miss., Memphis, Tenn., and Chicago. Mr. Burt was advanced to manager of the forest products bureau at Memphis in June, 1941, and served in that position continuously until his recent appointment as assistant to the director of purchases and stores.

ENGINEERING and SIGNALING

Frederick H. Lovell, assistant engineer of bridges and buildings of the Central region of the Pennsylvania, has been promoted to engineer of bridges and buildings, with headquarters as before at Pittsburgh, Pa., succeeding **J. F. Leonard,** who has been granted a leave of absence until July 1, when he will retire.

C. Paul Schantz, assistant chief engineer, maintenance of way, of the Pennsylvania at Philadelphia, Pa., has been appointed assistant to the chief engineer of the Eastern region, at Philadelphia. **H. J. Kerstetter,** engineer, maintenance of way, of the Eastern Pennsylvania division at Harrisburg, Pa., succeeds Mr. Schantz as assistant chief engineer, maintenance of way at Philadelphia and is succeeded by **F. P. Filippelli,** division engineer of the Philadelphia division at Harrisburg.

A. L. Fisher, division engineer of the St. Louis-San Francisco, with headquarters at Enid, Okla., has been appointed assistant superintendent—division engineer, for the western division at that point.

A. H. Grothmann, whose appointment as secretary of the Communications Section of the Association of American Railroads, with headquarters at New York, was reported in the *Railway Age* of January 15, was born on June 11, 1898, at Brooklyn, N. Y., where he received his education at the Commercial High School. He entered railroad service in April, 1917, in the motive power department of the Long Island, remaining with that road until April 20, 1920. In July of the same year he

A. H. Grothmann

became a committee reporter in the office of the secretary of the Telegraph and Telephone Section of the American Railway Association (now Communications Section, A.A.R.) at New York. He was appointed chief clerk in the Freight Container Bureau of the association at New York in July, 1936. Upon formation of the Freight Loading and Container Section of the A.A.R. in May, 1945, he was transferred to Chicago as secretary of that section, the position he held at the time of his recent appointment.

OBITUARY

George H. Kernkamp, who retired in 1946 as assistant treasurer of the Northern Pacific at St. Paul, Minn., died at his home in that city on January 8.

George S. Lee, a retired vice-president of the Railway Express Agency, died at his home in Rutherford, N. J., on January 19.

Reidy, assistant chief counsel of the commission; H. A. Hollopeter, transportation director, Indiana State Chamber of Commerce; Arne C. Wiprud, former chief of the Transportation Section, Anti-Trust Division, Department of Justice, who is now associate solicitor for the Post Office Department in the railroad mail-pay case; C. E. Childe, former member of the defunct Board of Investigation and Research; and David O. Mathews, chief of the Transportation Rate Unit, Anti-Trust Division, Department of Justice.

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tension to the latter point from Revelstoke, B. C., having been made in the past year, and consideration is now being given to its use right through to Vancouver.

Crosser Heads House Committee On Interstate Commerce

Members of the new House of Representatives received their committee assignments on January 18, and the chairmanship of the Committee on Interstate and Foreign Commerce went to Representative Robert Crosser, Democrat of Ohio, as had been expected. He succeeds Representative Charles A. Wolverton, Republican of New Jersey, who has become the committee's ranking minority member.

Other members of the 28-man committee are the following:

Democrats
Alfred L. Bulwinkle of North Carolina
Lindley Beckworth of Texas
J. Percy Priest of Tennessee
Oren Harris of Arkansas
George G. Sadowski of Michigan
Dwight L. Rogers of Florida
Eugene J. Keogh of New York
Arthur G. Klein of New York
Thomas B. Stanley of Virginia
John B. Sullivan of Missouri
William T. Granahan of Pennsylvania
Andrew J. Biemiller of Wisconsin
John A. McGuire of Connecticut
George H. Wilson of Oklahoma
Neil J. Linehan of Illinois
Thomas R. Underwood of Kentucky

Republicans
Carl Hinshaw of California
Leonard W. Hall of New York
Joseph P. O'Hara of Minnesota
Wilson D. Gillette of Pennsylvania
Robert Hale of Maine
Harris Ellsworth of Oregon
James I. Dolliver of Iowa
John W. Heselton of Massachusetts
Hugh D. Scott, Jr., of Pennsylvania
John B. Bennett of Michigan

Release Film of RR Fair Pageant

A motion picture featuring the "Wheels-A-Rolling" pageant of the 1948 Railroad Fair in Chicago has been released for non-theatrical showings. The original Fair narrators and the large symphony orchestra furnish sound for the film, which is available in 16-mm. sound-and-color, 16-mm. black-and-white and 8-mm. black-and-white. The picture is a production of John Ott Films, 730 Elm street, Winnetka, Ill., from which additional information may be obtained.

New Automatic Telephone Service On the Illinois Central

In shops, offices and other facilities of the Illinois Central at McComb, Miss., and Jackson, conventional telephones, connected to manual boards, have been replaced by dial telephones connected to new automatic switchboards. Also, 800 mi. of new long-distance trunk line circuits have been installed between McComb, Jackson and New Orleans, La. An automatic exchange was previously in service at New Orleans to connect dial phones in I. C. shops and offices in that city. With the new facilities, Illinois Central men at Jackson, McComb or New Orleans can now dial other I. C. offices in their own city or in the other two cities. It is possible also to dial to or from offices of the Missouri Pacific and the Southern Pacific, which have local automatic exchanges in New Orleans. The new private branch exchange equipment was installed by the Southern Bell Telephone Company, which owns and maintains it. Lines and other equipment were provided by the I. C.

J. F. Girault Dies; Was Assistant Director of I.C.C. Water Bureau

John F. Girault, assistant director of the Interstate Commerce Commission's Bureau of Water Carriers and Freight Forwarders, with headquarters at the commission's Washington, D. C., offices, died of a heart ailment on January 6. Mr. Girault, who was 56 years of age, joined the commission's staff in 1942. Prior to that time he had been freight traffic manager of the Federal Barge Lines, operated by the government-owned Inland Waterways Corporation.

I.C.C. Tribute to Barnard

Making the Interstate Commerce Commission's official announcement of the late Commissioner George M. Barnard's death, which was noted in *Railway Age* of January 8, Chairman Charles D. Mahaffie said that the commission had lost a "beloved and respected colleague." On January 5, the day on which funeral services were held for Mr. Barnard, the offices of the commission were closed until noon.

"Commissioner Barnard's fine personal qualities, his industry and professional skill, his integrity, forthrightness and fair-mindedness," Chairman Mahaffie also said, "had won the affection and esteem of the members of the commission and its staff to a high degree. His sudden death, after more than four years' devoted service, is a great loss not only to the commission but to the country."

George M. Barnard

Mr. Barnard was appointed to the commission by the late President Roosevelt to serve for the unexpired term of the late Joseph B. Eastman, which runs until December 31, 1950. He was a member of the Public Service Commission of Indiana and a Republican, the make-up of the I.C.C. having been such at the time that the President was required to name someone who was not a Democrat.

Mr. Barnard was born on June 6, 1881, at New Castle, Ind., and received his law degree at the University of Michigan in 1903. He then entered the practice of law at New Castle, continuing there until 1921, but meanwhile serving from 1906 until 1910 as prosecuting attorney of Henry County, Ind., and from 1910 until 1914 as mayor of New Castle.

Mr. Barnard was first appointed to the Indiana commission in 1921, but he resigned a year later to resume the practice of law with an Indianapolis firm whose partners included also the late Senators Samuel M. Ralston and Frederick Van Nuys. He was appointed again to the Indiana commission in July, 1941, and reappointed in 1943 for the term he was serving when he resigned to become a member of the I.C.C.

Westinghouse Designs 3-Way Power for Mine Locomotives

Five Westinghouse Electric Corporation mine locomotives designed to get their power either from a Diesel-electric unit, a ground-level third rail, or an overhead trolley line, will go into operation this year in the open-pit sulphide ore mines of the Chile Exploration Company in the Andes Mountains of South America, it has been announced by W. J. Clardy, manager of the traction department of Westinghouse Electric International. The three-way arrangement was devised to provide on-location flexibility in handling ore cars in the mines, which are located at an elevation of 10,000 ft. at Chuquicamata, Chile. When the locomotives are working along the various open-pit levels, where neither overhead nor third rail systems can carry power, they will use Diesel power. Each locomotive will have a 500-hp. Diesel engine, a railway generator and four traction motors. Controls will be so arranged that they can operate either the Diesel engine-generator unit, the third rail, or the overhead trolley line.

Will Hear More Argument on What Constitutes Private Trucking

The Interstate Commerce Commission has reopened for oral argument two proceedings which involve the distinction between private and for-hire trucking. They are Nos. MC-96541 and MC-107079, in which the trucking operations of the Lenoir Chair Company and the Schenley Distillers Corporation, respectively, are in issue.

Prior commission reports have held that these trucking operations are private carriage, the latest of those reports

having embodied Division 5's decision in the Schenley case (see *Railway Age* of August 7, 1948, page 41). The reopenings came after consideration by the commission of various petitions, including those filed by railroads which are members of the Trunk Line, New England Freight, and Central Freight associations.

Freight Car Loadings

Carloading figures for the week ended January 15 were not available when this issue went to press.

Loadings of revenue freight for the week ended January 8 totaled 721,507 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loadings
For the week ended Saturday, January 8

District	1949	1948	1947
Eastern	135,783	153,956	153,639
Allegheny	153,061	168,083	175,494
Pocahontas	61,993	73,299	74,531
Southern	120,569	145,612	141,995
Northwestern	77,767	90,854	93,028
Central Western	107,808	129,523	131,091
Southwestern	64,526	69,483	61,175
Total Western Districts	250,101	289,860	285,294
Total All Roads	721,507	830,810	830,953
Commodities:			
Grain and grain products	47,045	51,882	56,192
Livestock	11,024	14,029	21,503
Coal	164,010	202,741	203,466
Coke	16,108	15,037	14,357
Forest products	35,193	45,972	46,720
Ore	12,701	13,079	12,072
Merchandise l.c.l.	88,750	103,893	113,915
Miscellaneous	346,676	384,177	362,728
January 8	721,507	830,810	830,953
January 1	584,628	682,119	687,428
December 25, 1948	609,239	599,354	627,967
December 18, 1948	754,545	832,130	836,185
December 11, 1948	783,276	854,159	828,751

In Canada.—Carloadings for the week ended January 8 totaled 67,547 cars, as compared with 74,300 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 8, 1949	67,547	29,641
January 10, 1948	74,300	33,120

Douglass Reappointed to N.M.B.

President Truman has sent to the Senate his nomination of Frank P. Douglass for a new three-year term as a member of the National Mediation Board. The new term would expire February 1, 1952.

Judge Douglass' reappointment had been expected, since it became known recently that he had agreed to remain on the board at the request of President Truman. Prior to that time Judge Douglass had planned to retire with the expiration of his present term on February 1. He has been a member of N.M.B. since 1944.

Army's Transportation Corps Moves to New Headquarters

Headquarters of the Army's Chief of Transportation was recently moved from the Pentagon Building, Arlington, Va., to Building T-7 at Gravelly Point, Va. A like move was made at the same time by the Military Transportation Section of the Car Service Division, Association of American Railroads.

New Snows Keep Plows Busy in Rocky Mountain Blizzard Area

Railroad service in the Rocky Mountain and Great Plains area was again hampered last week as the fourth snowstorm within two months hit the area on January 14. The latest storm caught railroads — particularly the Chicago, Burlington & Quincy, the Chicago & North Western and the Union Pacific — just as their operations neared normal following the January 2 blizzard, which has been characterized by some railroad men as the worst ever suffered. The fresh snow, plus winds, required a replowing of certain lines. As this issue of *Railway Age* went to press, a new storm was in progress, threatening more interruptions in service.

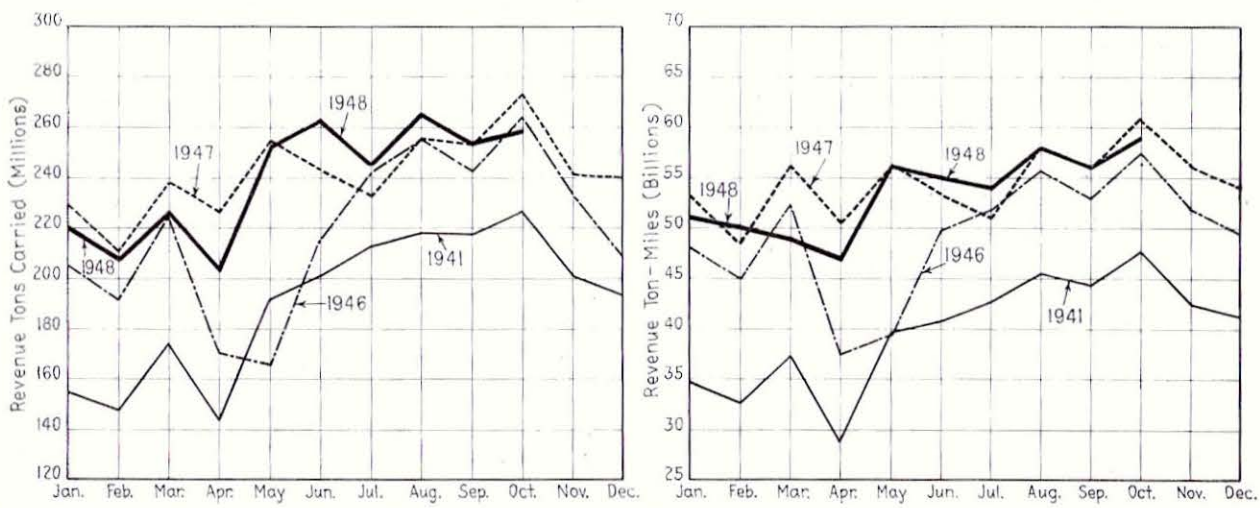
The paralyzing blizzard of January 2 forced a large number of passenger trains, many of them name streamliners, to halt at various points in the face of 10- to 20-ft. drifts packed solid by winds which ranged from 40 to 70 m.p.h. Freight trains were similarly delayed, but no serious congestion was reported and no embargoes were issued. Other railroads affected to some extent were the Denver & Rio Grande Western; Chicago, Milwaukee, St. Paul & Pacific; and Chicago, Rock Island & Pacific. No hardships for passengers were reported, as trains were halted at sizeable towns.

One railroad officer said of the January 2 blizzard that there has "never been anything like it" from the standpoint of snow compactness, duration of the storm and its complete coverage.

Add Service Charge to Cost of Reserved-Seat Coach-Train Fare

A special charge will be added to prices of tickets purchased for use on and after February 1 on reserved-seat coach trains operated by a number of eastern and southern railroads. Designed primarily to defray the higher expenses involved in the sale of reserved coach seats and the larger costs of providing these trains with comforts not available on ordinary coach trains, the special charge also is intended to induce passengers to give adequate advance notice of cancellations. The service charge, plus the fare, will be refunded on cancellations up to certain times before departure. If cancellations are not made within the specified period the service charge will not be refunded and a new charge will be levied if reservations are changed to another date or train.

The special charge on the New York Central will be 50 cents for distances up to and including 350 mi., 75 cents for trips of 351 to 600 mi., and $1 for all distances over 600 mi. On the Pennsylvania the special charge will be a flat rate of $1. Locally on the Seaboard



Revenue Tons and Revenue Ton-Miles—1948 Compared with 1941, 1946 and 1947

Air Line, the charge will be 50 cents where the one-way coach fare is less than $6.26 and a $1 charge will apply in instances where the fare is $6.26 or more. On interline traffic, the special service charge will be $1 between all points on the S.A.L. and stations on the Pennsylvania from Baltimore, Md., to New York, inclusive. Between all Seaboard stations and all Richmond, Fredericksburg & Potomac stations the $1 charge will apply, with certain exceptions. The New York Public Service Commission, on January 19, ordered the New York Central to suspend its plan for the special charge on travel in New York and scheduled a hearing for February 10 in New York City on the proposed charge.

B. of L. E. Local Plans Strike against Long Island

A strike against the Long Island threatened by division 269 of the Brotherhood of Locomotive Engineers because of allegedly unsafe motive power was made without the approval of the brotherhood's national office, according to a statement by Alvanley Johnston, president of the B. of L. E., which was reported as this issue of *Railway Age* was going to press. Mr. Johnston said authorization to strike had been requested by division 269 some time ago but had not been given. A spokesman for division 269 said strike ballots were being handed out and that the division will act in accord with provisions of the Railway Labor Act. A strike called for January 19 against the Hudson & Manhattan by the B. of L. E. was postponed pending an effort by the National Mediation Board to settle the dispute which allegedly centers on signaling practices.

General Gross Gets Military Government Post in Germany

Major General Charles P. Gross, who was chief of the Army's Transportation Corps during World War II, has been appointed director of the United States Military Government in the German state of Wurttemberg-Baden. The appointment became effective January 17, when General Gross succeeded Charles M. LaFollette, former congressman from Indiana.

General Gross retired from the Army in 1945, and was appointed chairman of New York City's Board of Transportation. He resigned from that position in October, 1947, and shortly thereafter went to Germany where he has been serving as a civilian transportation officer on the staff of the military government.

Additional General News appears on pages 69 and 70.

EQUIPMENT AND SUPPLIES

Pennsylvania to Install More Train Communication

The Pennsylvania's telephone system for communication between trains and between trains and signal towers is being extended to cover 350 more miles of line, between Baltimore, Md., York, Pa., Harrisburg, Williamsport, and Elmira, N. Y., and between Williamsport, Lock Haven, and Tyrone. Locomotives on these lines already have been equipped with telephones. Ten wayside signal towers are now being equipped for the service at a cost of about $76,000. Built by Union Switch & Signal Co., the equipment will be in use by early spring.

The Baltimore-Harrisburg line is an important link in the Pennsylvania's route between Washington, D. C., and the West and North; the Harrisburg-Williamsport-Elmira line serves northwestern Pennsylvania and New York state; and the Tyrone-Lock Haven-Williamsport line carries heavy freight traffic between the West and New England. Including earlier installations on the four-track main line between Harrisburg and Pittsburgh, and on freight lines in Ohio and New Jersey, the train telephone system upon completion of this project will cover 1,817 mi. of main tracks. A total of 407 passenger and freight locomotives, 130 cabooses and 58 signal towers will then be equipped.

FREIGHT CARS

The **Mather Stock Car Company** has ordered 50 40-ton refrigerator cars which will be built in the company's shops late this year.

The **Northern Pacific** has ordered 500 70-ton hopper cars from the Pressed Steel Car Company. Delivery of the cars is expected to start next June.

The **Chicago & North Western** is inquiring for 1,000 50-ton box cars.

The **Delaware, Lackawanna & Western** is inquiring for 250 to 500 50-ton drop-end gondola cars.

The **Northern Pacific** is inquiring for 750 50-ton box cars.

SIGNALING

The Union Switch & Signal Co. is furnishing the **American Locomotive Company** four sets of intermittent inductive train control equipment for installation on new Diesel passenger locomotives now building for the **Pittsburgh & Lake Erie.** This equipment is to be similar to that now in service on that road except that it will include a three-speed governor to provide for enforcement of a low speed reset and control of an overspeed warning indicator and brake application.

American Locomotive Company has ordered eight sets of intermittent inductive train control equipment from the General Railway Signal Company, for installation on Diesel-electric freight locomotives for the **New York Central.**

The **American Locomotive Company** has placed an order with the General Railway Signal Company for four sets of intermittent inductive train control equipment for installation on Diesel-electric freight locomotives for the **Erie.**

IRON & STEEL

The **Florida East Coast** has ordered 13,000 net tons of rail from the Tennessee Coal, Iron & Railroad Co., and 2,000 net tons from the Bethlehem Steel Company.

ORGANIZATIONS

The forty-second annual dinner of the **Traffic Club of Washington, D. C.,** will be held on the evening of February 9 at the Mayflower hotel in that city. Arthur H. Gass, chairman of the Car Service Division, Association of American Railroads, will be toastmaster; and the guest speaker will be Mayor John F. Davis of Reading, Pa., whose subject will be "Free Enterprise."

The **Transportation Club of the Rochester, N. Y., Chamber of Commerce** will hold its twenty-fifth annual dinner on February 10. Cloud Wampler, president, Carrier Corporation, Syracuse, N. Y., will be the guest speaker.

The next meeting of the **Railfan Society** will be held at 8 p.m. on February 15, at 20 West 40th street, New York. F. W. Bender, signal engineer of the Central of New Jersey, will be the guest speaker and movies on the C. of N. J. also will be presented.

Railroad Enthusiasts, Inc., New York division, will hold its next meeting on January 26 at 7:45 p.m., in room 5928, Grand Central Terminal. The guest speaker will be Leo B. George, assistant chief of motive power, Canadian Pacific, who will talk on "Railroading in the Canadian Rockies," and show a sound-color picture, "The Shining Mountains." "Within the Oval," a new New York Central movie, also will be presented.

The thirty-fifth annual dinner of the **Traffic Club of Cleveland** will be held at the Hotel Cleveland on February 3, at

6.30 p.m. H. D. Rhodehouse, general traffic manager, Republic Steel Corporation, and president of the club, will preside. Cornelius J. McCole, humorist, philosopher and former mayor of Wilkes-Barre, Pa., will be the principal speaker.

The nineteenth annual show and exhibition of the **New York Society of Model Engineers** will be held from February 11 to 22, inclusive, in the Upper Ferry Concourse of the Lackawanna Terminal at Hoboken, N. J., from 5:30 p.m. to 10 p.m. daily and 1 p.m. to 10 p.m. on Saturdays, Sundays and holidays.

The **Car Foremen's Association of Chicago** will hold its next meeting on February 14 at 8 p.m., at the LaSalle Hotel. The Association of American Railroads Committee of the association will present recommendations for changes in 1950 in A.A.R. Interchange Rules.

The **Signal Section** of the **Association of American Railroads** has announced the following officers for 1949: Chairman, **L. S. Werthmuller,** signal engineer, Missouri Pacific Lines, St. Louis, Mo.; first vice-chairman, **W S. Storms,** signal engineer, Erie, Cleveland, Ohio; and second vice-chairman, **D. W. Fuller,** signal engineer, Atchison, Topeka & Santa Fe, Topeka, Kan.

SUPPLY TRADE

S. E. Gillespie, whose election as president of the **Western Railroad Supply Company** at Chicago, was reported in the *Railway Age* of January 1, was born on December 17, 1884, at Newtonville,

S. E. Gillespie

Ohio, and graduated from Ohio State University in electrical engineering in 1910. Before graduating, Mr. Gillespie had about two years' experience as a telegraph operator on the Lake Shore & Michigan Southern (now New York Central), the New York, Chicago & St. Louis and the Pennsylvania, and two years' experience in maintaining electric interlockings on the Pennsylvania, Lines West. After graduating in 1910, he went to work for the Union Switch & Signal Co. with a field crew, erecting signals. He entered the engineering department at Swissvale, Pa., in 1911, and remained there until 1915, when he was transferred to the sales department in Chicago. From 1921 to 1925, Mr. Gillespie represented the Union Switch & Signal Co. in Japan, and, on his return, was assigned temporarily to the Chicago office of the company, and then appointed resident manager at San Francisco, Cal., in 1926. In 1930 he was elected vice-president and director of Westinghouse International Brake & Signal Co., with headquarters in Brussels, Belgium, and in February, 1939, became vice-president of the Western Railroad Supply Company, the position he held at the time of his recent election as president.

John J. Huether, manager of the transportation division of the **General Electric Company** since April, 1948, also has been appointed manager of the central station division to succeed **Ralph M. Darrin,** who has been elected a commercial vice-president and assigned to customer relations work in the New England territory. Mr. Huether was graduated from Notre Dame University in 1922 with a degree in electrical engineering

John J. Huether

and joined General Electric's test course the same year as a student engineer. A year later, he was assigned to the alternating current engineering department. He joined the steel mill section of the industrial department in 1924 and was promoted to manager of sales in the machinery manufacturers section in 1931. In 1937, Mr. Huether was appointed manager of the mining and steel mill section of the industrial department.

The **Black & Decker Manufacturing Co.,** Towson, Md., has announced the removal of its Chicago sales and service station to a new building at 1100 W. Jackson boulevard. **R. G. Horner** is branch manager.

The **American Steel & Wire Co.,** a subsidiary of the United States Steel Corporation, has announced the establishment of a separate stainless steel sales division, to be known as the stainless steel products sales division. **Banks E. Eudy** has been appointed manager of the new division and **C. Richard Horwedel** has been appointed assistant manager.

Mr. Eudy's first position in the steel

Banks E. Eudy

industry was with the Allegheny Steel Company, with which he was associated from 1917 until 1936. In 1936 he joined the stainless division of the Carnegie-Illinois Steel Corporation and served as district representative for that company in Cleveland, Ohio. In July, 1947, Mr. Eudy was transferred to American Steel & Wire and headed the stainless

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steel unit which was the forerunner of the new division.

Mr. Horwedel was associated with the Thompson Products Company from 1928 to 1930. He joined American Steel & Wire in 1930 and has since been identified with the company's metallurgical department. He was at Worcester,

Mass., until 1936, when he was transferred to Cleveland.

The **United States Rubber Company** has announced the elections of **Herbert E. Smith,** president, as chairman of the board and chief executive officer, to succeed **F. B. Davis, Jr.,** retired, and **Harry E. Humphreys, Jr.,** vice-president and chairman of the finance committee, as president and chairman of the executive committee. Mr. Davis will continue as a director and member of the finance committee. The company also has announced the elections of **Arthur Surkamp,** treasurer, as vice-president and chairman of the finance committee to succeed Mr. Humphreys, and **Herbert M. Kelton,** general auditor, as treasurer succeeding Mr. Surkamp. Mr. Surkamp also has been elected a director and a member of the executive committee.

Mr. Smith started his career with the United States Rubber Company in August, 1913, as a mechanical goods salesman and later was promoted to general salesman, covering the Sacramento valley (Cal.) territory. In 1918, he was transferred to the company's New York headquarters as assistant western sales manager, mechanical goods division, and later in the year was appointed manager of the New York branch in charge of all commodi-

Herbert E. Smith

ties. In 1924 Mr. Smith was appointed general manager of the general division and, in 1926, was promoted to second vice-president. He was made vice-president of the United States Rubber Company, Ltd., in 1927 and president of that subsidiary in 1929. In the same year he was elected a director and vice-president of the United States Rubber Company in charge of sales and distribution. On January 1, 1942, Mr. Smith was made vice-chairman of the executive committee, succeeding to the presidency on September 28 of that year. He also was named chairman of the executive committee and a member of the finance committee at the same time.

Mr. Humphreys started his business career in 1918 and worked successively with the Pennsylvania Railroad and the Toledo Scale Company until 1922, when he joined the Alan Wood Iron & Steel Co. In the same year he enrolled in the Wharton School of Finance evening classes at the University of Pennsylvania. Two years later he joined Price, Waterhouse & Co. as an auditor. In 1927 he became associated with the Christiana Securities Company, where he remained for 11 years, advancing to secretary and assistant treasurer of the company. Mr. Humphreys was elected

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a vice-president, director and member of the finance committee of the United States Rubber Company in 1938 and was given the additional responsibility of heading the finance committee in January, 1942. Later in the same year he was elected vice-chairman of the executive committee.

Warner B. Shepherd, assistant general traffic manager of the **Aluminum Company of America,** has been appointed general traffic manager, to succeed **E. A. Jack,** retired.

Edwin F. Bates, works manager of the Red Lion plant of the **Budd Company,** has been promoted to plant manager, and **Lee N. Blugerman,** assistant works manager, has been promoted to works manager.

Samuel W. Earnshaw has announced the opening of a general office for practice of transportation law in the Woodward building, Washington, D. C.

Roy E. Smith has been elected president of the **Stefco Steel Company** at Michigan City, Ind.

The **General American Transportation Corporation,** Chicago, has announced the appointment, as sales engineer, of **F. E. Cheshire,** formerly vice-president of the Chicago, Indianapolis & Louisville. Mr. Cheshire, in his new post, recently departed by air for the Far East.

David Newhall, John S. Wood and **Charles A. Marshall** have incorporated under the firm name of **Newhall-Marshall-Wood,** with offices at 30 Church street, New York 7, to engage in purchase and sale of surplus, obsolete and scrap railroad cars, locomotives, parts, and other kinds of equipment.

Harold W. Lahey has been elected chairman of the board of directors of the **Ulster Iron Works,** and **Frank W. Hamilton, Jr.,** a vice-president, has been elected president to succeed his late father, whose death was reported in the *Railway Age* of December 18, 1948, page 71.

Karl S. Wright has been appointed general traffic manager of the **Carborundum Company** to succeed **George E. Griffith,** who has retired after 25 years of service in that capacity. Mr. Wright has been associated with Mr. Griffith for 14 years.

The **Pyle-National Company,** Chicago, has appointed **Ralph B. Black** as its district manager at Houston, Tex., with jurisdiction over the firm's operations in Texas, Oklahoma, New Mexico, Colorado and that part of Louisiana west of the Mississippi River. Mr. Black has until recently been associated with the R. P. Devine Construction

Ralph B. Black

Company at Sterling, Ill. He was born at Denver, Colo., was graduated by the University of Colorado, and served as a consulting engineer in Houston from 1934 to 1942. He spent 4½ years in the U. S. Army Engineers Corps during World War II, being discharged as a major. Mr. Black's headquarters at Houston will be in the Chronicle Building.

E. J. Fuller, executive vice-president and general manager of the **Hunt-Spiller Manufacturing Corporation,** has retired. Mr. Fuller was born in Clinton, Iowa, in 1883. He began his business career as a machinist's apprentice with the Chicago & North Western, at Clinton, and continued there as machinist after completing his apprenticeship. Later, he was appointed to a supervisory position in the mechanical department. From 1911 to 1913 he was chief inspector of new equipment for the C. & N. W., at the Schenectady, N. Y., plant of the

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Roy E. Smith has been elected president of the **Stefco Steel Company** at Michigan City, Ind.

The **General American Transportation Corporation,** Chicago, has announced the appointment, as sales engineer, of **F. E. Cheshire,** formerly vice-president of the Chicago, Indianapolis & Louisville. Mr. Cheshire, in his new post, recently departed by air for the Far East.

David Newhall, John S. Wood and **Charles A. Marshall** have incorporated under the firm name of **Newhall-Marshall-Wood,** with offices at 30 Church street, New York 7, to engage in purchase and sale of surplus, obsolete and scrap railroad cars, locomotives, parts, and other kinds of equipment.

Harold W. Lahey has been elected chairman of the board of directors of the **Ulster Iron Works,** and **Frank W. Hamilton, Jr.,** a vice-president, has been elected president to succeed his late father, whose death was reported in the *Railway Age* of December 18, 1948, page 71.

Karl S. Wright has been appointed general traffic manager of the **Carborundum Company** to succeed **George E. Griffith,** who has retired after 25 years of service in that capacity. Mr. Wright has been associated with Mr. Griffith for 14 years.

The **Pyle-National Company,** Chicago, has appointed **Ralph B. Black** as its district manager at Houston, Tex., with jurisdiction over the firm's operations in Texas, Oklahoma, New Mexico, Colorado and that part of Louisiana west of the Mississippi River. Mr. Black has until recently been associated with the R. P. Devine Construction

Ralph B. Black

Company at Sterling, Ill. He was born at Denver, Colo., was graduated by the University of Colorado, and served as a consulting engineer in Houston from 1934 to 1942. He spent 4½ years in the U. S. Army Engineers Corps during World War II, being discharged as a major. Mr. Black's headquarters at Houston will be in the Chronicle Building.

E. J. Fuller, executive vice-president and general manager of the **Hunt-Spiller Manufacturing Corporation,** has retired. Mr. Fuller was born in Clinton, Iowa, in 1883. He began his business career as a machinist's apprentice with the Chicago & North Western, at Clinton, and continued there as machinist after completing his apprenticeship. Later, he was appointed to a supervisory position in the mechanical department. From 1911 to 1913 he was chief inspector of new equipment for the C. & N. W., at the Schenectady, N. Y., plant of the

American Locomotive Company. Mr. Fuller joined Hunt-Spiller in 1914 and served as mechanical representative until his appointment as assistant sales manager in 1927. He became sales manager in 1928 and was elected executive vice-president in 1936. In 1942 he was elected general manager and continued also as executive vice-president.

E. J. Fuller

OBITUARY

William L. Stancliffe, a former vice-president in charge of sales of the American Car & Foundry Co., died on January 16. He was 65 years old.

CONSTRUCTION

M.P. Will Spend $13 Million For Improvements in 1949

The Missouri Pacific Lines have been authorized by the Federal District Court at St. Louis, Mo., to spend $13,147,010 for improvement of its properties during 1949. Of this total, $4,596,830 is for new steel rail and track accessories, as reported in the *Railway Age* of October 23, 1948, page 60. Other principal items in the program and their approximate costs are: Additional yard tracks, sidings and industry tracks ($1,488,180); bridges, trestles and culverts ($1,345,640); changes of grade and alignment ($957,700); signals and interlocking plants ($763,400); freight and passenger stations ($678,880); and shop buildings, enginehouses and similar structures ($453,200).

Long Island.—This road has authorized the reconstruction of Undergrade bridge at Cherry lane, Mineola, N. Y., at a probable cost of $128,700.

Pittsburgh & West Virginia.—This road has awarded a contract to the American Bridge Company for the reinforcing and repairing of six steel bridge superstructures from Wellsburg, W. Va., to Mingo, Ohio, at a probable total cost of $291,000.

FINANCIAL

Pennsylvania.—*Would Buy Long Island Bonds.*—The Pennsylvania has announced that if the Long Island does not pay at maturity on March 1 the $40,000,000 of the latter's refunding mortgage 4 per cent bonds of 1903 and the unified mortgage bonds of 1899, the P.R.R. will buy the bonds from holders at face value plus interest to March 1.

Rutland.—*Reorganization.*—Division 4 of the Interstate Commerce Commission has submitted this road's approved plan of reorganization to three classes of creditors for acceptance or rejection under the applicable provisions of section 77 of the Bankruptcy Act. The three groups, which the division found were the only creditors entitled to vote on the plan, are holders of Rutland first consolidated mortgage 4½ per cent bonds, due July 1, 1941; Ogdensburg & Lake Champlain first mortgage 4 per cent bonds, due July 1, 1948, and Rutland-Canadian first mortgage 4 per cent bonds, due July 1, 1949. The ballots are due at the commission's office in Washington, D. C., on or before March 14.

Tennessee Central.—*R.F.C. Financing.*—Division 4 of the Interstate Commerce Commission has approved purchase by the Reconstruction Finance Corporation, at par, of $918,000 of this road's 3 per cent equipment trust certificates, series F, if and when issued "pursuant to the approval of the commission under section 20(a) of the Interstate Commerce Act." The proposed certificates would be dated March 1 and would mature in 20 semi-annual installments—19 of $46,000 each and the last of $44,000. The proceeds would be used to finance in part the acquisition of six 1,500-hp. Diesel-electric road-freight locomotives from the American Locomotive Company at a total cost of $1,020,000.

Waterloo, Cedar Falls & Northern.—*Dividend.*—This road paid on January 15 a dividend of 12½ cents a share on its common stock. The dividend was the first since the stock was split 3-for-1. The last payment on the old stock was 35 cents a share on October 15.

Wheeling & Lake Erie.—*New Director.*—Lynne L. White, executive vice-president of this road, has been elected a member of the board of directors to succeed the late John W. Davin.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Erie.—To assume liability for $6,300,000 of 2¼ per cent equipment trust certificates to finance in part the acquisition of rolling stock expected to cost a total of $7,929,850. The rolling stock was listed in the application as follows:

	Description and builder	Estimated Unit Cost
2	6,000-hp. Diesel-electric freight locomotives, each consisting of 4 units (Electro-Motive Division, General Motors Corporation)	$661,200
5	2,000-hp. Diesel-electric passenger locomotives (American Locomotive Company)	216,650
2	1,500-hp. Diesel-electric road switching locomotives (American)	149,950
4	1,000-hp. Diesel-electric switching locomotives (American)	102,775
6	1,000-hp. Diesel-electric switching locomotives (Lima-Hamilton Corporation)	102,200
700	50-ton, steel-sheathed box cars (American Car & Foundry Co.)	4,850
7	Lightweight sleeping cars (Pullman-Standard Car Manufacturing Company)	115,000

The certificates would be dated December 15, 1948, and would mature in 10 annual installments of $630,000 each, beginning December 15, 1949. They would be sold on the basis of competitive bids.

New York, Chicago & St. Louis.—To assume liability for $4,320,000 of series E equipment trust certificates, to finance in part the acquisition of nine Diesel-electric locomotive units of 1,500 hp. each and 1,000 freight cars at an estimated total cost of $5,406,662. The locomotive units, ordered from the Electro-Motive Division of the General Motors Corporation, consist of seven "A" units costing $173,756 each and two "B" units costing $167,877 each. The freight cars, ordered from the Pullman-Standard Car Manufacturing Company, consist of 500 50-ton hopper cars costing $3,802 each and 500 50-ton gondola cars costing $3,905 each. The certificates would be dated February 1 and would mature in 15 annual installments of $288,000 each, beginning February 1, 1950. They would be sold on the basis of competitive bids, and the interest rate would be fixed by such bids.

Wheeling & Lake Erie.—To assume liability for $2,120,000 of series R equipment trust certificates, to finance in part the acquisition of 500 70-ton gondola cars from the American Car & Foundry Co. at an estimated total cost of $2,650,000 ($5,300 per car). The certificates would be dated February 15 and would mature in 20 semi-annual installments of $106,000 each, beginning August 15. They would be sold on the basis of competitive bids, and the interest rate would be fixed by such bids.

Division 4 of the I.C.C. has **authorized:**

Illinois Central.—To assume liability for $6,400,000 of series BB equipment trust certificates, to finance in part the acquisition of 1,750 50-ton steel hopper cars from the Pullman-Standard Car Manufacturing Company at an estimated total cost of $8,034,250 ($4,591 per car). The certificates will be dated January 1 and will mature in 20 semi-annual installments of $320,000 each, beginning July 1. The report approved a selling price of 99.3905 for the issue with a 2¼ per cent interest rate—the bid of Halsey, Stuart & Co. and associates, which will make the average annual interest cost approximately 2.39 per cent. The certificates were reoffered to the public at prices yielding from 1.4

per cent to 2.5 per cent, according to maturity.

Missouri-Kansas-Texas.—To assume liability for $1,800,000 of equipment trust certificates to finance in part the acquisition of seven Diesel-electric locomotives at an estimated total cost of approximately $2,426,694 (see *Railway Age* of December 4, 1948, page 70). The certificates will be dated February 1 and will mature in 30 semi-annual installments of $60,000 each, beginning August 1. The report approved a selling price of 99.2006 for the issue with a 2½ per cent interest rate—the bid of Harris, Hall & Co. and associates, which will make the average annual interest cost approximately 2.63 per cent. The certificates were reoffered to the public at prices yielding from 1.4 per cent to 2.8 per cent, according to maturity.

Average Prices Stocks and Bonds

	Jan. 18	Last week	Last year
Average price of 20 representative railway stocks	43.47	43.67	48.06
Average price of 20 representative railway bonds	89.78	89.10	86.34

Dividends Declared

Green Bay & Western.—common, $5.00, payable February 15 to holders of record February 4; income debentures A, $50.00, payable February 16; income debentures B (resumed), $7.50, payable February 16.

Louisville, Henderson & St. Louis.—common, $4.00, semi-annually; 5% non-cumulative preferred, $2.50, semi-annually; both payable February 15 to holders of record February 1.

RAILWAY OFFICERS

EXECUTIVE

F. E. Cheshire, formerly operating vice-president of the Chicago, Indianapolis & Louisville at Lafayette, Ind., and more recently vice-president of the road at Chicago, has resigned from the road and accepted a sales post with the General American Transportation Corporation, as noted elsewhere in this issue.

William W. Rhoads, secretary and treasurer of the Reading, with headquarters at Philadelphia, Pa., has been elected also vice-president. Mr. Rhoads was born at Philadelphia on November 15, 1889, and entered the service of the Reading in 1906 as messenger, becoming a clerk in the office of the superintendent of transportation the following year. He remained in the latter position until 1915, when he transferred to the office of the vice-president and general manager. In 1918 Mr. Rhoads was appointed secretary to the federal manager, and two years later became secretary to the vice-president, remaining in that position for four years. He then was appointed assistant chief clerk in the vice-president's office, becoming chief clerk five years later. On July 1, 1933, Mr. Rhoads was appointed assistant to the vice president and on March 26, 1936, became assistant to the president, serving in that capacity until September 1, 1945, when he was appointed

William W. Rhoads

assistant secretary and assistant treasurer. He has been secretary and treasurer since October 23, 1945. Mr. Rhoads has long been identified with Reading Y.M.C.A. work and is on the board of the Transportation department of the National Council of the Y.M.C.A.

William D. McCaig, vice-president—accounts of the Atlantic Coast Line at Wilmington, N. C., has retired from active service at his own request, after 56 years of service with the A.C.L. and its predecessor companies. Mr. McCaig was born at Mt. Carmel, Pa., on January 18, 1874, and entered railroad service in 1891 as office boy to freight claim agent of the Central of Georgia,

William D. McCaig

subsequently becoming stenographer. In 1893 he became stenographer in the auditor's office of the Brunswick & Western (now A.C.L.) and the following year he was appointed clerk in the office of the auditor of receipts, Plant system (now A.C.L.), subsequently becoming traveling auditor of that system. In 1902 he became chief traveling auditor of the A.C.L.; in 1906, auditor of station accounts; in 1911, assistant auditor freight receipts and in 1917, assistant comptroller. Mr. McCaig was promoted to comptroller of the A.C.L. in 1924, becoming vice-president in March, 1943.

William M. Long, whose election as vice-president—traffic of the Illinois Terminal at St. Louis, Mo., was reported in the *Railway Age* of January 1, was born on March 29, 1889, at Peoria, Ill., and began his railroad career in 1907 with the Cleveland, Cincinnati, Chicago & St. Louis as a telegraph operator at Mackinaw, Ill. His subsequent career included service with the Chicago & Alton (now part of the Gulf, Mobile & Ohio) at Bloomington, Ill., and Peoria; with the Illinois Central as city freight agent at Peoria and Omaha, Neb., and later in its service bureau at Chicago and as city freight

William M. Long

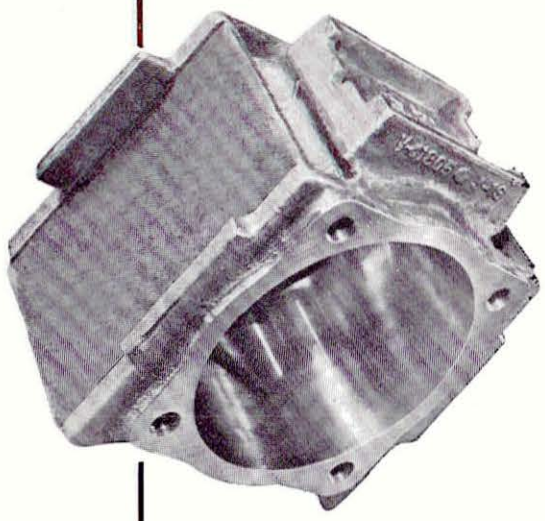
and passenger agent at Peoria; and with the Illinois Traction System (now I. T.), at Peoria, as traveling freight and passenger agent. He became general agent of the I. T. at Peoria in 1925, and was advanced to assistant general freight agent at Chicago in 1929. He was promoted to northern traffic manager at Chicago in 1939, and remained in that position until 1941, when he was transferred to New York as eastern traffic manager. Mr. Long was appointed assistant vice-president—traffic at St. Louis in November, 1947, which position he held up to the time of his election as vice-president—traffic.

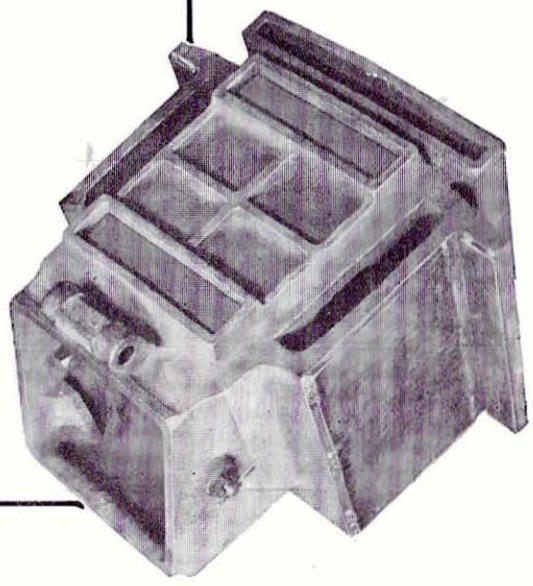
Thomas J. Deegan, Jr., director of public relations of the Chesapeake & Ohio, with headquarters at New York and Cleveland, Ohio, has been elected vice-president of public relations, in which capacity he will also supervise the company's advertising. Mr. Deegan is also president of the Federation for Railway Progress and for the last two years has been assistant to Robert R.

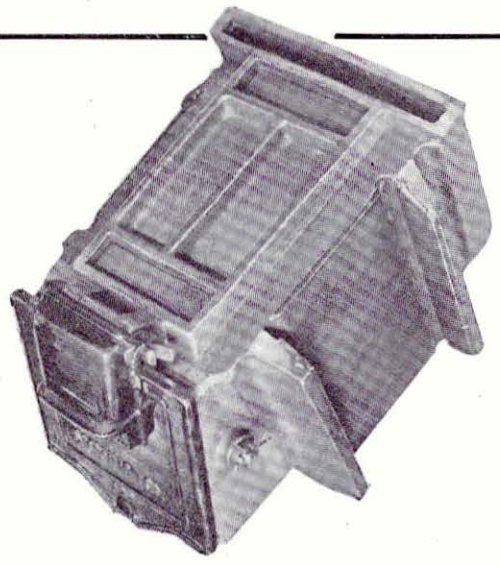
News Department continued on next left-hand page

JOURNAL BOXES

by Franklin







Franklin is manufacturing journal boxes for railroads, locomotive and car builders and bearing manufacturers. Here are three typical boxes.

We have the facilities for manufacturing both surface-bearing and roller-bearing boxes from raw material to finished box entirely within one plant. Boxes are made of electric furnace steel, cast in our own foundry — and are machined on modern equipment by trained personnel accustomed to close tolerances.

We invite your inquiries.

FRANKLIN RAILWAY SUPPLY COMPANY

A CORPORATION

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

advanced to superintendent of the Fort Wayne, (Ind.) division. Mr. Allen is replaced by **Thomas F. Schaekel,** trainmaster of the Columbus, (Ohio) division. Mr. Harris succeeds **Park M. Roeper,** who in turn has been appointed superintendent of the Middle division at Altoona, Pa., to succeed **Harry G. Hostetter,** whose death was reported in the *Railway Age* of January 8.

R. W. Hundley, assistant superintendent of the Norfolk division of the Virginian, has been transferred to the New River division, with headquarters at Princeton, W. Va., succeeding **D. F. Savage,** resigned.

Eugene L. Keller has been appointed supervising safety agent of the New York Central system, with headquarters at New York.

M. B. Oliver, assistant superintendent of the Charleston & Western Carolina, with headquarters at Augusta, Ga., has been appointed assistant to general manager of the Atlantic Coast Line at Wilmington, N. C. **W. H. Kendall** has also been appointed assistant to general manager of the A.C.L.

TRAFFIC

J. W. Padden, whose promotion to traffic manager of the Union Pacific at Salt Lake City, Utah, was reported in the *Railway Age* of January 1, first entered railway service in 1914 as a section laborer on the Oregon-Washington Railroad & Navigation Co. (now Union Pacific). He subsequently held various positions in the operating departments of the Atchison, Topeka &

J. W. Padden

Santa Fe and the Union Pacific until 1925, when he joined the traffic department of the U. P. at Astoria, Ore., where he served successively as a stenographer, clerk and cashier. In 1930 he became a clerk at Portland, Ore., and the next year he was advanced to general agent of the U. P. Stages at the latter point and to traffic agent there in 1935. He served as traveling freight and passenger agent and as general agent, with headquarters at Bend, Ore., from 1935 to 1941, when he was made general agent at Tacoma, Wash. Mr. Padden was appointed general agent, freight department, at Salt Lake City in 1943, and assistant traffic manager at Los Angeles, Cal., in 1944, which position he held at the time of his recent promotion to traffic manager at Salt Lake City.

W. B. Hansen, general agent of the Chicago, South Shore & South Bend at Chicago, has been appointed general freight agent at South Bend, Ind., succeeding the late **A. W. Oberfell,** whose death was reported in the *Railway Age* of December 18, 1948.

George Williams, traffic counsel of the Denver & Rio Grande Western at Denver, Colo., has retired after nearly 28 years of service.

William J. Thorworth, general agent of the St. Louis-San Francisco at Mobile, Ala., has been promoted to traffic manager at that point.

Gordon T. Frayne, assistant steamship general passenger agent of the Canadian Pacific at Montreal, Que., has been promoted to steamship general passenger agent, with the same headquarters, succeeding **Howard M. MacCallum,** who has retired after 44 years of service with the C.P.R.

Edward Eggleston, passenger agent of the Chicago, Rock Island & Pacific at Los Angeles, Cal., has been appointed district freight and passenger agent at Cleveland, Ohio, succeeding **C. H. Wagoner,** who has retired. **F. L. Rettke,** assistant general freight agent at Chicago, has taken over the duties of **W. M. Spaulding,** also assistant general freight agent at that point, who has resigned. **W. C. Carlson,** chief clerk to the freight traffic manager at Chicago, has been advanced to assistant general freight agent there.

William Robson, passenger traffic representative of the Canadian Pacific at Montreal, Que., has been appointed general agent, with the same headquarters.

T. P. Cumberland, division passenger agent of the Gulf, Mobile & Ohio at Mobile, Ala., will retire on January 31, after 43 years of service with that road. He is to be succeeded by **E. A. Chapman,** division passenger agent at New Orleans, La., who in turn will be succeeded by **L. H. Nugent,** division passenger agent at Kansas City, Mo. **J. R. Stevenson,** district passenger agent at Little Rock, Ark., will be transferred to Dallas, Tex. The positions formerly held by Mr. Nugent and Mr. Stevenson will be abolished.

Oscar W. South, Jr., general freight agent (rates and divisions) of the Norfolk Southern at Norfolk, Va., has been elected a member of the Standing Rate Committee of the Southern Freight Association, Atlanta, Ga.

MECHANICAL

Frank K. Mitchell, whose appointment as manager of equipment of the New York Central at New York was reported in the *Railway Age* of January 15, was born at Indianapolis, Ind., on November 17, 1894, and was graduated from Purdue University with a degree in electrical engineering. He entered the service of the Cleveland, Cincinnati, Chicago & St. Louis (New York Central) as an electrician at Beech Grove, Ind., in 1918, becoming draftsman in 1919, and special engineer in the motive power department at Beech Grove

Frank K. Mitchell

in 1922. Mr. Mitchell was appointed assistant to superintendent motive power at Indianapolis, in 1923, master mechanic in 1932, and assistant superintendent of equipment in 1938. He became assistant to general superintendent of motive power at New York in 1940 and the following year was appointed assistant general superintendent of motive power and rolling stock. In April, 1946, Mr. Mitchell was promoted to general superintendent motive power and rolling stock at New York, which position he held until his recent appointment as manager of equipment.

T. R. Fredriks and **J. B. Biancardi,** assistants to assistant chief engineer motive power and rolling stock, of the New York Central system at New York, have been appointed assistant engineers, equipment, at New York, reporting to **E. L. Johnson,** assistant chief engineer, equipment. **G. M. Davies,** assistant engineer, motive power, has been appointed assistant engineer, locomotive equipment, at New York, reporting to **H. W. Faus,** engineer, locomotive equipment. **R. H. Graff** and **G. T. Wilson,** assistant engineers, rolling stock, have been appointed assistant engineers, car

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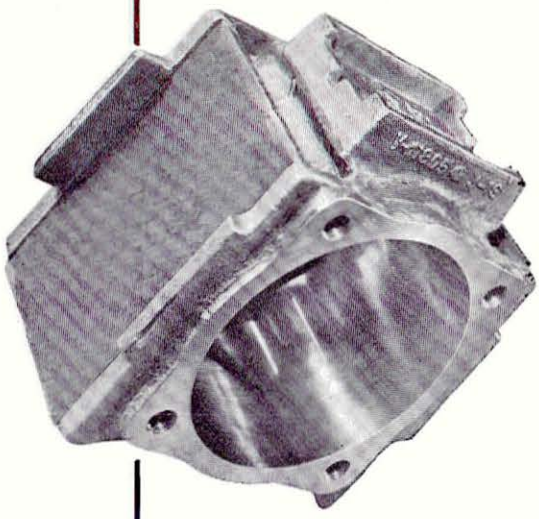
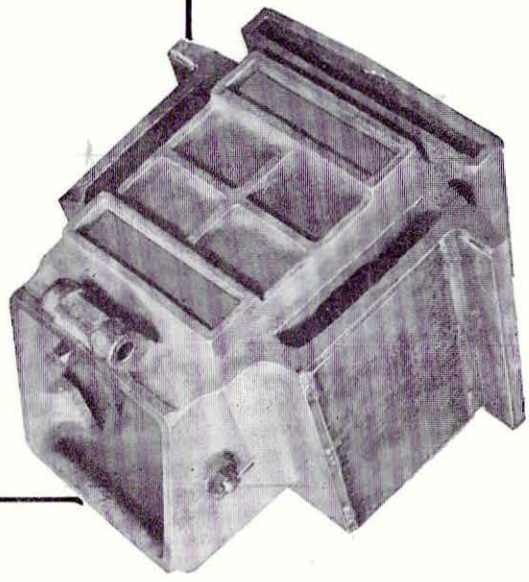
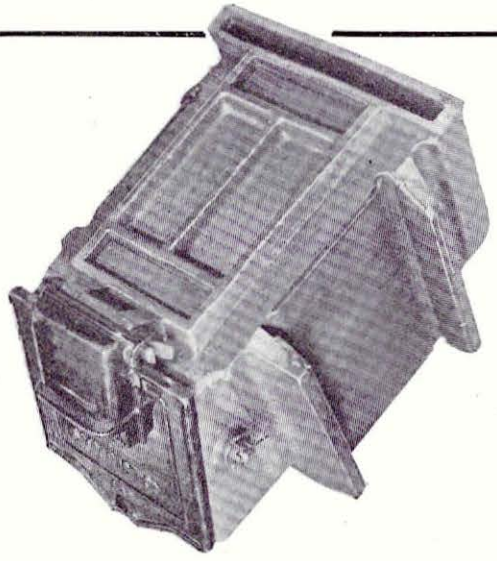
JOURNAL BOXES

by Franklin







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Young, founder and chairman of the federation. A photograph and biography of Mr. Deegan were published in the *Railway Age* of October 9, 1948, page 693.

FINANCIAL, LEGAL and ACCOUNTING

William L. Grubbs, whose appointment as general counsel of the Louisville & Nashville at Louisville, Ky., was reported in the *Railway Age* of December 25, 1948, is a native of that city, where he attended high school and the Jefferson School of Law. He entered L. & N. service on September 1, 1917, as a stenographer in the office of the chief special agent at Louisville. After serving with the armed forces during

William L. Grubbs

World War I, he returned to the railroad in January, 1919, as a stenographer in the law department. In April, 1921, he became secretary to the general attorney and later to the general solicitor. Mr. Grubbs was appointed commerce attorney in August, 1928, advancing to assistant general solicitor in March, 1944, which position he held at the time of his recent appointment as general counsel.

Arthur J. Messersmith, assistant general auditor of the Chicago, Rock Island & Pacific, with headquarters at Chicago, has been elected general auditor to succeed **T. A. Graham,** whose death was reported in the *Railway Age* of January 1. **Albert Weiberg,** assistant to the general auditor and **C. A. Bowen,** formerly on the staff of the assistant general auditor, have been appointed assistant general auditors. **H. C. Bradshaw,** assistant tax accountant, has replaced Mr. Weiberg.

K. D. M. Spence has been appointed commission counsel for the Canadian Pacific at Montreal, Que., to specialize in matters before the Board of Transport Commissioners for Canada and the Interstate Commerce Commission. Mr. Spence, who has for some time been engaged in the freight rate case and other work before the board, has been in the C.P.R. law department since 1930. He was appointed solicitor in 1945 following his demobilization from the Royal Navy, with which he served for four years.

W. Harvey Small, personnel attorney of the Western Maryland at Baltimore, Md., has been appointed general attorney.

Kemper A. Dobbins, assistant general attorney of the New York, Chicago & St. Louis, has been promoted to general attorney, with headquarters as before at Cleveland, Ohio. **John C. Lyon,** attorney, succeeds Mr. Dobbins as assistant general attorney.

C. J. Brandau, assistant to the auditor of the Wabash at St. Louis, Mo., has been promoted to auditor of disbursements at that point, succeeding **L. G. Lind,** who has retired after 42 years of service. **H. A. Izard** has replaced Mr. Brandau.

George Gillings, assistant to the vice-president and treasurer of the Canadian National system, with headquarters at Montreal, Que., has been appointed clerk and treasurer of the Central Vermont, with headquarters at St. Albans, Vt., succeeding **John B. Wood,** who died on January 4, as reported in the *Railway Age* of January 15. Mr. Gillings began his railroad career with the Canadian Northern (now Canadian National) in his native city of Toronto,

George Gillings

Ont., in 1919 as a junior clerk in the office of the vice-president of operation, maintenance and construction and the following year transferred to the office of vice-president, finance and accounting. In 1923 he went to Montreal when the department was moved there, and a year later was promoted to secretary to the vice-president. He became office assistant to the vice-president in 1934, and was appointed assistant to the vice-president and treasurer in June, 1945, which position he held until his recent promotion.

M. L. Boydston, tax agent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle, Wash., has been transferred to Chicago, succeeding **R. G. Bundy,** whose appointment as tax commissioner was reported in the *Railway Age* of January 8. **E. J. Notske** has replaced Mr. Boydston.

OPERATING

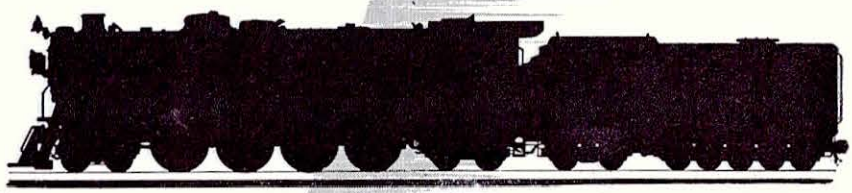
William G. White, whose promotion to general superintendent of the Delaware, Lackawanna & Western at New York was reported in the *Railway Age* of January 1, was born at San Francisco, Cal. He attended the University of California, was graduated in civil engineering by George Washington University, Washington, D. C., and entered railroad service as a student employee of the Yosemite Valley at Merced, Cal. Mr. White joined the Lackawanna in June, 1935, as yard clerk and student employee at Hoboken, N. J. After serving as supervisor of freight claim prevention at Scranton, Pa., from June, 1937, to January, 1941, Mr. White was assigned to special duty. In March, 1942, he became freight trainmaster at Port Morris, N. J., and the following August became trainmaster at Buffalo, N. Y. He was promoted to superintendent at Buffalo in May, 1943, being furloughed in January, 1944, to enter military service as a major in the Army Transportation Corps. He served in England, France and Germany with the General Staff from September, 1944, until March, 1946, when he was released from active duty, with the rank of lieutenant-colonel, returning to the Lackawanna as superintendent at Hoboken in April, 1946.

William G. White

Wendell C. Allen, superintendent of freight transportation, Western region, of the Pennsylvania, with headquarters at Chicago, has been promoted to superintendent of freight transportation, Eastern region, at Philadelphia, Pa., succeeding **A. M. Harris,** who has been

News Department continued on next left-hand page

Don't make stepchildren of your steam locomotives



Surely it is important to protect your investment in your existing steam motive power. There are plenty of veteran steam locomotives which — merely with the modernization of certain features—can turn in a good profit on their operation for many years to come.

The installation of Security Circulators, for example, will definitely improve steaming performance and make possible much greater locomotive utilization — sufficient to rapidly repay the installation cost.

The many advantages resulting from the use of Security Circulators have been shown by the road experience of fifty railroads — with installations of Security Circulators in twenty-five different types of locomotives.

* * *

For oil-burning steam locomotives the American Arch Company recently developed and introduced the Security Dutch Oven. Its value in improving combustion has been recognized by a number of railroads, which have already installed Dutch Ovens in over two hundred locomotives.

American Arch Company Inc.

NEW YORK • CHICAGO

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M. B. Oliver, assistant superintendent of the Charleston & Western Carolina, with headquarters at Augusta, Ga., has been appointed assistant to general manager of the Atlantic Coast Line at Wilmington, N. C. **W. H. Kendall** has also been appointed assistant to general manager of the A.C.L.

TRAFFIC

J. W. Padden, whose promotion to traffic manager of the Union Pacific at Salt Lake City, Utah, was reported in the *Railway Age* of January 1, first entered railway service in 1914 as a section laborer on the Oregon-Washington Railroad & Navigation Co. (now Union Pacific). He subsequently held various positions in the operating departments of the Atchison, Topeka &

J. W. Padden

Santa Fe and the Union Pacific until 1925, when he joined the traffic department of the U. P. at Astoria, Ore., where he served successively as a stenographer, clerk and cashier. In 1930 he became a clerk at Portland, Ore., and the next year he was advanced to general agent of the U. P. Stages at the latter point and to traffic agent there in 1935. He served as traveling freight and passenger agent and as general agent, with headquarters at Bend, Ore., from 1935 to 1941, when he was made general agent at Tacoma, Wash. Mr. Padden was appointed general agent, freight department, at Salt Lake City in 1943, and assistant traffic manager at Los Angeles, Cal., in 1944, which position he held at the time of his recent promotion to traffic manager at Salt Lake City.

W. B. Hansen, general agent of the Chicago, South Shore & South Bend at Chicago, has been appointed general freight agent at South Bend, Ind., succeeding the late **A. W. Oberfell,** whose death was reported in the *Railway Age* of December 18, 1948.

George Williams, traffic counsel of the Denver & Rio Grande Western at Denver, Colo., has retired after nearly 28 years of service.

William J. Thorworth, general agent of the St. Louis-San Francisco at Mobile, Ala., has been promoted to traffic manager at that point.

Gordon T. Frayne, assistant steamship general passenger agent of the Canadian Pacific at Montreal, Que., has been promoted to steamship general passenger agent, with the same headquarters, succeeding **Howard M. MacCallum,** who has retired after 44 years of service with the C.P.R.

Edward Eggleston, passenger agent of the Chicago, Rock Island & Pacific at Los Angeles, Cal., has been appointed district freight and passenger agent at Cleveland, Ohio, succeeding **C. H. Wagoner,** who has retired. **F. L. Rettke,** assistant general freight agent at Chicago, has taken over the duties of **W. M. Spaulding,** also assistant general freight agent at that point, who has resigned. **W. C. Carlson,** chief clerk to the freight traffic manager at Chicago, has been advanced to assistant general freight agent there.

William Robson, passenger traffic representative of the Canadian Pacific at Montreal, Que., has been appointed general agent, with the same headquarters.

T. P. Cumberland, division passenger agent of the Gulf, Mobile & Ohio at Mobile, Ala., will retire on January 31, after 43 years of service with that road. He is to be succeeded by **E. A. Chapman,** division passenger agent at New Orleans, La., who in turn will be succeeded by **L. H. Nugent,** division passenger agent at Kansas City, Mo. **J. R. Stevenson,** district passenger agent at Little Rock, Ark., will be transferred to Dallas, Tex. The positions formerly held by Mr. Nugent and Mr. Stevenson will be abolished.

Oscar W. South, Jr., general freight agent (rates and divisions) of the Norfolk Southern at Norfolk, Va., has been elected a member of the Standing Rate Committee of the Southern Freight Association, Atlanta, Ga.

MECHANICAL

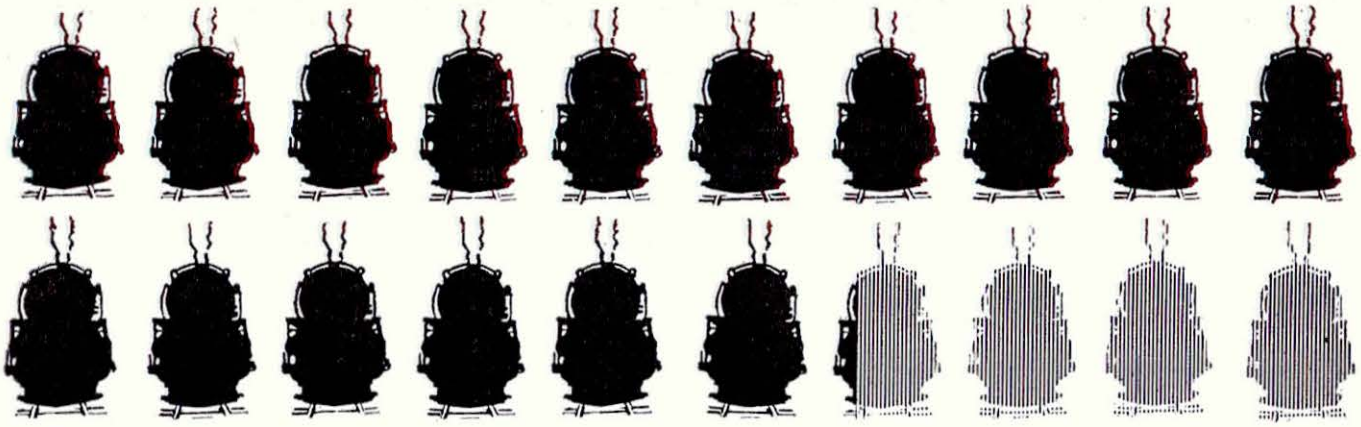
Frank K. Mitchell, whose appointment as manager of equipment of the New York Central at New York was reported in the *Railway Age* of January 15, was born at Indianapolis, Ind., on November 17, 1894, and was graduated from Purdue University with a degree in electrical engineering. He entered the service of the Cleveland, Cincinnati, Chicago & St. Louis (New York Central) as an electrician at Beech Grove, Ind., in 1918, becoming draftsman in 1919, and special engineer in the motive power department at Beech Grove

Frank K. Mitchell

in 1922. Mr. Mitchell was appointed assistant to superintendent motive power at Indianapolis, in 1923, master mechanic in 1932, and assistant superintendent of equipment in 1938. He became assistant to general superintendent of motive power at New York in 1940 and the following year was appointed assistant general superintendent of motive power and rolling stock. In April, 1946, Mr. Mitchell was promoted to general superintendent motive power and rolling stock at New York, which position he held until his recent appointment as manager of equipment.

T. R. Fredriks and **J. B. Biancardi,** assistants to assistant chief engineer motive power and rolling stock, of the New York Central system at New York, have been appointed assistant engineers, equipment, at New York, reporting to **E. L. Johnson,** assistant chief engineer, equipment. **G. M. Davies,** assistant engineer, motive power, has been appointed assistant engineer, locomotive equipment, at New York, reporting to **H. W. Faus,** engineer, locomotive equipment. **R. H. Graff** and **G. T. Wilson,** assistant engineers, rolling stock, have been appointed assistant engineers, car

News Department continued on next left-hand page



82.6% of all steam locomotives in U.S. are maintained with HSGI VITAL PARTS

THE high quality of Hunt-Spiller Gun Iron is generally recognized on most of America's railroads. Consequently, the valve and cylinder bushings, packing, crosshead shoes, or other vital parts of an overwhelmingly large majority of steam locomotives here are made of HSGI, whose close, evenly-graphited structure give it unique ability to withstand heat and wear. A record like this is assurance that you can depend upon any part made of Hunt-Spiller Gun Iron.

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Valve Bushings	Floating Rod Bushings	
Valve Packing Rings	Light Weight Valves	Cylinder Snap Rings
Valve Bull Rings	Cylinder Liners and Pistons for Diesel Service	Valve Rings, All Shapes

equipment, at New York, reporting to **E. P. Moses,** engineer, car equipment. **G. B. Wakeley,** assistant equipment electrical engineer, has been appointed assistant engineer, electrical equipment, at New York, reporting to **W. S. H. Hamilton,** engineer, electrical equipment. **M. S. Riegel,** assistant engineer, tests, will retain that title and report to **W. F. Collins,** engineer, tests. **A. J. Serieno** has been appointed assistant engineer, brake equipment, at New York, reporting to **L. D. Hays,** engineer, brake equipment.

E. J. Haley, Jr., roundhouse foreman of the Atlantic Coast Line at Rocky Mount, N. C., has been appointed general mechanical inspector at Wilmington, N. C.

H. G. Comrie, general boiler inspector for the Prairie and Pacific regions of the Canadian Pacific, with headquarters at Winnipeg, Man., retired on December 31. He is succeeded by **H. E. Gregory,** assistant general boiler inspector at Calgary, Alta.

PURCHASES & STORES

J. H. Lauderdale, whose retirement as general purchasing agent of the Missouri Pacific Lines at St. Louis, Mo., was reported in the *Railway Age* of January 1, was born on December 21, 1878, at Dyersburg, Tenn., and was graduated by the University of Kentucky. He began his railway career with the St. Louis-San Francisco as a clerk in the freight station at Memphis, Tenn., and two years later joined the Tennessee Central in the office of the vice-president and general manager at

J. H. Lauderdale

Nashville, Tenn. In 1905 he was employed by the Gulf Coast Lines (part of M. P.), then under construction, as assistant to the vice-president and general manager, and was subsequently advanced to purchasing agent. During World War I he left that post to serve with the United States Railroad Administration—first as a member of the forest products committee, and later as assistant manager in charge of liquidating material and supply department claims. He returned to the Gulf Coast Lines in 1924 as general purchasing agent of the International-Great Northern at Houston, Tex. The next year he was appointed general purchasing agent for the Texas and Louisiana properties of the M. P. Mr. Lauderdale was transferred to St. Louis in 1933 as general purchasing agent for the entire M. P. system.

Clarence S. Burt, whose appointment as assistant to the director of purchases and stores for the Illinois Central at Chicago was reported in the *Railway Age* of December 25, 1948, is a native of Oakland, Miss. He was educated at Millsaps College, Jackson, Miss., and Mississippi State College, Starkville. He began his railway career with the I. C. in April, 1919, as a

Clarence S. Burt

treatment inspector in cross tie service at Grenada, Miss., and was subsequently stationed at Carbondale, Ill., New Orleans, La., Hattiesburg, Miss., Memphis, Tenn., and Chicago. Mr. Burt was advanced to manager of the forest products bureau at Memphis in June, 1941, and served in that position continuously until his recent appointment as assistant to the director of purchases and stores.

ENGINEERING and SIGNALING

Frederick H. Lovell, assistant engineer of bridges and buildings of the Central region of the Pennsylvania, has been promoted to engineer of bridges and buildings, with headquarters as before at Pittsburgh, Pa., succeeding **J. F. Leonard,** who has been granted a leave of absence until July 1, when he will retire.

C. Paul Schantz, assistant chief engineer, maintenance of way, of the Pennsylvania at Philadelphia, Pa., has been appointed assistant to the chief engineer of the Eastern region, at Philadelphia. **H. J. Kerstetter,** engineer, maintenance of way, of the Eastern Pennsylvania division at Harrisburg, Pa., succeeds Mr. Schantz as assistant chief engineer, maintenance of way at Philadelphia and is succeeded by **F. P. Filippelli,** division engineer of the Philadelphia division at Harrisburg.

A. L. Fisher, division engineer of the St. Louis-San Francisco, with headquarters at Enid, Okla., has been appointed assistant superintendent—division engineer, for the western division at that point.

A. H. Grothmann, whose appointment as secretary of the Communications Section of the Association of American Railroads, with headquarters at New York, was reported in the *Railway Age* of January 15, was born on June 11, 1898, at Brooklyn, N. Y., where he received his education at the Commercial High School. He entered railroad service in April, 1917, in the motive power department of the Long Island, remaining with that road until April 20, 1920. In July of the same year he

A. H. Grothmann

became a committee reporter in the office of the secretary of the Telegraph and Telephone Section of the American Railway Association (now Communications Section, A.A.R.) at New York. He was appointed chief clerk in the Freight Container Bureau of the association at New York in July, 1936. Upon formation of the Freight Loading and Container Section of the A.A.R. in May, 1945, he was transferred to Chicago as secretary of that section, the position he held at the time of his recent appointment.

OBITUARY

George H. Kernkamp, who retired in 1946 as assistant treasurer of the Northern Pacific at St. Paul, Minn., died at his home in that city on January 8.

George S. Lee, a retired vice-president of the Railway Express Agency, died at his home in Rutherford, N. J., on January 19.

ARC WELDING SIMPLIFIES DESIGN... SPEEDS OUTPUT OF HOPPER CARS

Fig. 1. Part of 25 arc welded steel hopper cars turned out daily by the American Car and Foundry Co., Huntington, W. Va., for the Chesapeake & Ohio Railroad.

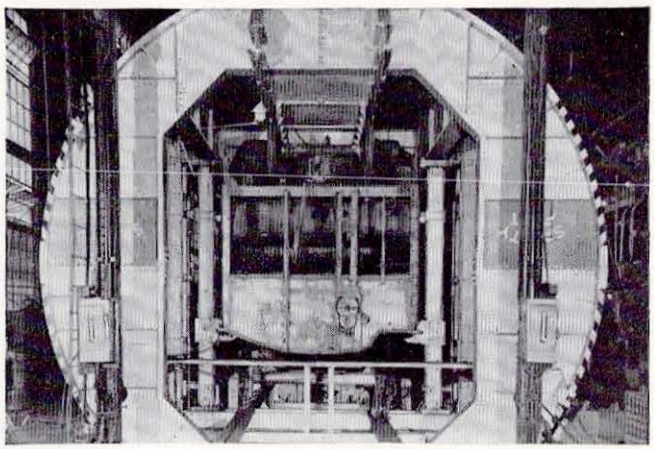


Fig. 2. Hopper car held inverted in "turn-over" type fixture to allow fast, low-cost arc welding with "Automatic Lincolnweld" process.

By A. T. COX
Vice President, Lincoln Electric Railway Sales Co.
Cleveland, Ohio

Straight-line production methods embodying the latest techniques in arc welding and work handling devices result in a daily output of 25 hopper cars at the American Car and Foundry Shops in Huntington, West Virginia, for the Chesapeake & Ohio Railroad. Through welded fabrication, the construction of 7,000 of these 70-ton hopper cars is being greatly simplified, and many costly operations formerly required are being eliminated. In addition, solid welded joints eliminate the corrosion points found in the open lapped joints and ledges that exist in riveted design.

The welding is done with the hidden arc process using "Automatic Lincolnweld" units incorporated in fast, air-operated clamp-type fixtures. The high intensity welding currents used result in faster welding with deeper penetration and eliminate the need for joint preparation. The welding arc is completely hidden in granular flux. Arc rays are invisible; smoke and spatter normally encountered with hand welding are avoided. With welding current and travel rate preset, the operator needs only to start and stop the welding cycle.

Short irregular welds are made with the "Manual Lincolnweld." Similar to the "Automatic Lincolnweld," this process combines the benefits of hidden arc welding in granular flux with the versatility of hand welding with coated electrodes. With the "Manual Lincolnweld," (Fig. 5), the electrode feed is automatic and continuous. The granular flux is directed to the weld from a cone-shaped reservoir on the hand welding gun.

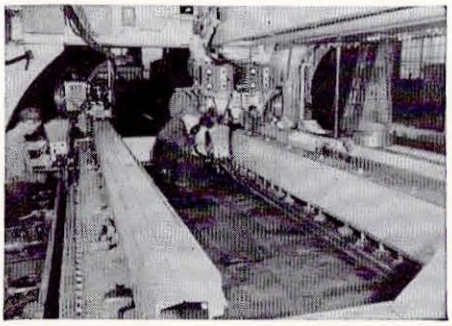


Fig. 3. Arc welding bulb angles and pressed channel side sills to top and bottom of weld-assembled side sheets using the "Automatic Lincolnweld" process.

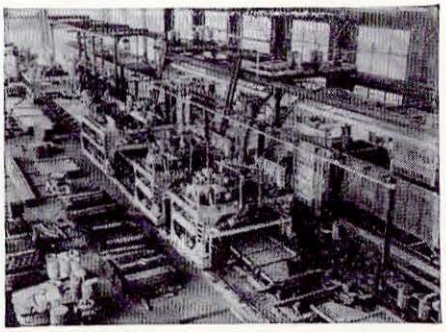


Fig. 4. General view of car shop showing continuous-line production setup for weld-fabricating hopper cars.

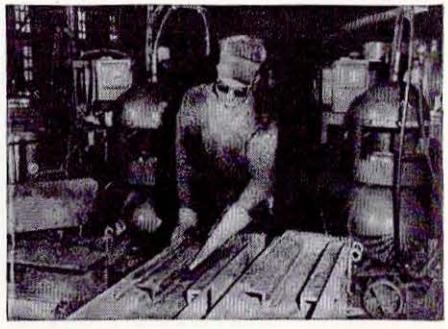


Fig. 5. Hand welding an insert piece to frame channels using submerged arc welding with "Manual Lincolnweld."

The above is published by **THE LINCOLN ELECTRIC COMPANY** *in the interests of progress.*
For further information about arc welding procedures or equipment, write The Lincoln Electric Railway Sales Co., 11 Public Square, Cleveland, Ohio, railroad representatives of The Lincoln Electric Company, Cleveland Ohio.

OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways.

(Switching and Terminal Companies Not Included)

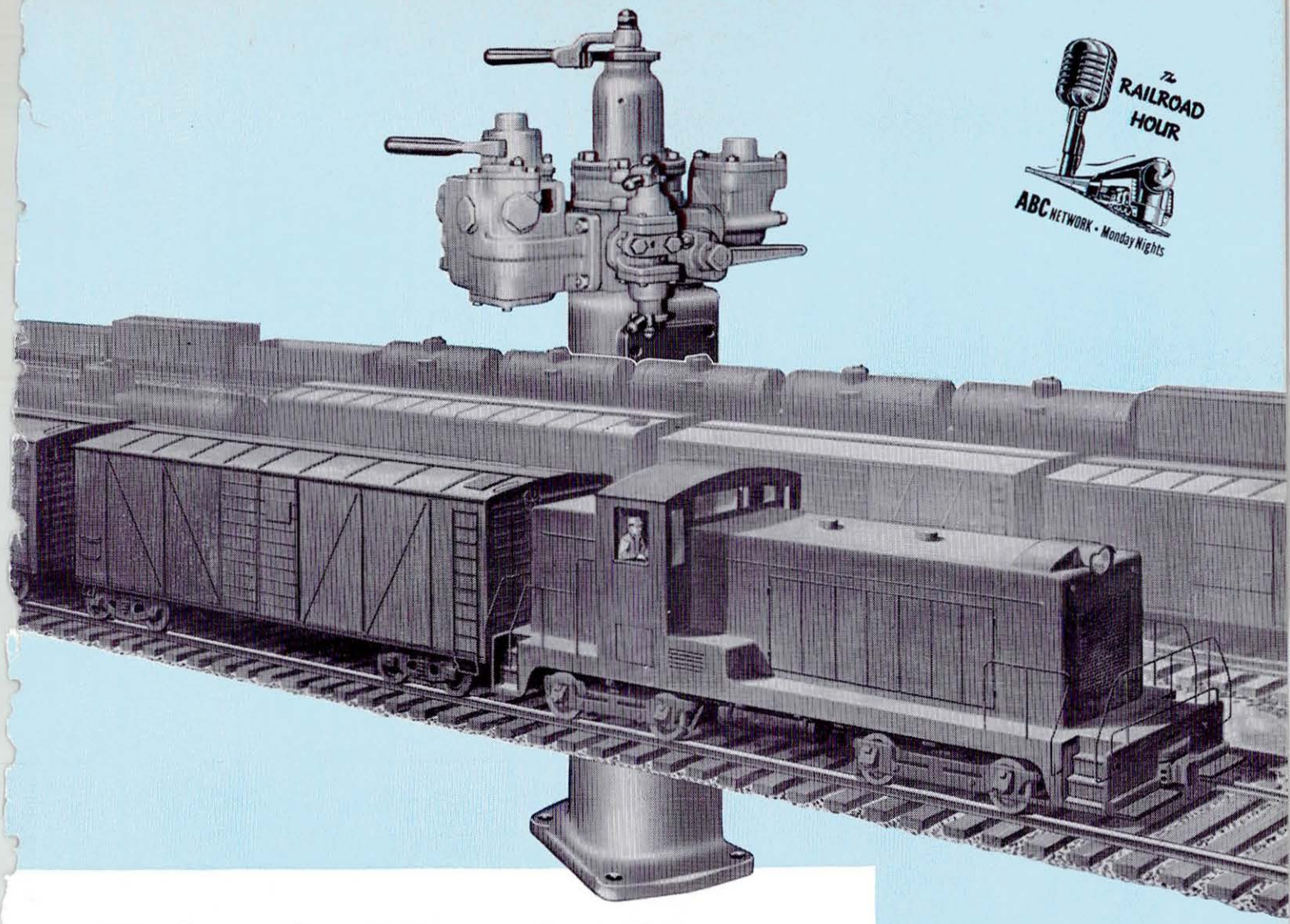
FOR THE MONTH OF OCTOBER, 1948 AND 1947

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month	226,680	227,322	53,487	53,725	46,068	46,162	127,125	127,435
Revenues:								
Freight	$738,587,674	$664,874,504	$278,421,169	$246,574,817	$143,626,874	$132,621,339	$316,539,631	$285,678,348
Passenger	75,316,015	75,010,264	39,644,369	38,653,892	10,875,118	11,027,999	24,796,528	25,328,373
Mail	18,183,668	12,778,749	6,624,352	4,992,047	3,139,080	2,163,078	8,420,236	5,623,624
Express	9,944,650	7,343,062	3,249,038	1,785,939	1,527,489	1,199,792	5,168,123	4,357,331
All other operating revenues	36,088,857	34,803,979	16,066,652	15,364,502	5,755,107	5,991,037	14,267,098	13,448,440
Railway operating revenues	878,120,864	794,810,558	344,005,580	307,371,197	164,923,668	153,003,245	369,191,616	334,436,116
Expenses:								
Maintenance of way and structures	120,858,533	113,744,582	46,295,278	42,486,482	24,702,977	24,460,132	49,860,278	46,797,968
Depreciation	10,428,494	10,241,304	4,412,149	4,397,979	1,824,544	1,740,937	4,191,801	4,102,388
Retirements	1,607,369	1,795,790	480,976	372,301	99,858	271,746	1,026,535	1,151,743
Deferred maintenance	*147,979	*1,053,500	*6,842	*26,891	*58,500	*298,312	*82,637	*728,297
Amortization of defense projects	163,719	133,805	14,781	*9,352	42,666	68,137	106,272	75,020
Equalization	*1,399,111	*674,343	*834,098	*271,402	*817,928	*678,009	252,915	275,068
All other	110,206,041	103,301,526	42,228,312	38,023,847	23,612,337	23,355,633	44,365,392	41,922,046
Maintenance of quipment	148,974,465	139,439,962	61,994,438	59,989,915	30,099,211	27,516,865	56,880,816	51,933,182
Depreciation	21,801,997	19,100,413	8,619,543	7,649,603	4,776,803	4,347,727	8,405,651	7,103,083
Retirements	*50,505	*99,138	*6,462	*9,377	*29,148	*8,025	*14,895	*81,736
Deferred maintenance and major repairs	*182,482	*212,671	44,000	118,000	*200,272	*78,470	*26,210	*252,201
Amortization of defense projects	1,227,068	1,221,937	452,333	452,263	238,910	239,125	535,825	530,549
Equalization	51,277	210,529	1,972	47,058	11,361	135,019	37,944	28,452
All other	126,127,110	119,218,892	52,883,052	51,732,368	25,301,557	22,881,489	47,942,501	44,605,035
Traffic	16,624,214	15,608,254	5,768,809	5,543,054	3,490,510	3,321,176	7,364,895	6,744,024
Transportation—Rail line	331,507,888	310,443,892	138,804,591	132,251,846	59,772,112	56,861,768	132,931,185	121,330,278
Miscellaneous operations	10,929,554	10,963,495	4,222,205	4,117,170	1,576,079	1,571,089	5,131,270	5,275,236
General	23,014,795	21,831,302	8,866,819	8,395,659	5,137,714	4,753,665	9,010,262	8,681,978
Railway operating expenses ‡	651,909,449	612,031,487	265,952,140	252,784,126	124,778,603	118,484,695	261,178,706	240,762,666
Net revenue from railway operations	226,211,415	182,779,071	78,053,440	54,587,071	40,145,065	34,518,550	108,012,910	93,673,450
Railway tax accruals	100,778,745	89,504,780	31,756,776	28,062,379	20,640,947	18,853,575	48,381,022	42,588,826
Pay-roll taxes	22,395,802	31,862,320	9,301,479	13,245,712	4,243,511	6,217,372	8,850,812	12,399,236
Federal income taxes†	51,354,566	32,706,845	12,141,912	5,644,118	10,787,827	7,476,311	28,424,827	19,586,416
All other taxes	27,028,377	24,935,615	10,313,385	9,172,549	5,609,609	5,159,892	11,105,383	10,603,174
Railway operating income	125,432,670	93,274,291	46,296,664	26,524,692	19,504,118	15,664,975	59,631,888	51,084,624
Equipment rents—Dr. balance	11,403,268	12,821,321	5,232,722	5,176,711	*1,837,177	*956,174	8,007,723	8,600,784
Joint facility rent—Dr. balance	3,152,545	3,573,523	1,493,403	1,681,615	460,908	549,469	1,198,234	1,342,439
Net railway operating income	110,876,857	76,879,447	39,570,539	19,666,366	20,880,387	16,071,680	50,425,931	41,141,401
Ratio of expenses to revenues(per cent)	74.2	77.0	77.3	82.2	75.7	77.4	70.7	72.0

FOR THE TEN MONTHS ENDED WITH OCTOBER, 1948 AND 1947

Item	United States		Eastern District		Southern District		Western District	
	1948	1947	1948	1947	1948	1947	1948	1947
Miles of road operated at close of month	227,043	227,454	53,614	53,729	46,137	46,185	127,292	127,540
Revenues:								
Freight	$6,636,967,638	$5,789,480,505	$2,528,455,858	$2,193,267,515	$1,357,099,276	$1,202,327,066	$2,751,412,504	$2,393,885,924
Passenger	799,411,707	800,209,123	407,529,233	401,621,747	124,713,437	129,196,239	267,169,037	269,391,137
Mail	157,881,362	115,112,762	56,966,310	43,740,022	28,192,743	20,354,429	72,722,309	51,018,311
Express	99,886,322	91,908,426	33,332,145	26,780,933	16,892,609	16,317,991	49,661,568	48,809,502
All other operating revenues	345,549,468	329,740,392	152,665,712	145,170,392	57,135,152	55,834,266	135,748,604	128,735,734
Railway operating revenues	8,039,696,497	7,126,451,208	3,178,949,258	2,810,580,609	1,584,033,217	1,424,029,991	3,276,714,022	2,891,840,608
Expenses:								
Maintenance of way and structures	1,126,083,952	1,007,714,245	420,323,172	369,159,451	234,461,189	218,956,632	471,299,591	419,598,162
Depreciation	103,617,681	101,475,443	43,941,214	43,378,051	18,057,412	17,382,215	41,619,055	40,715,177
Retirements	11,182,388	10,981,429	2,624,500	2,380,993	1,573,488	2,214,892	6,984,400	6,385,544
Deferred maintenance	*3,070,613	*5,283,263	*105,988	*238,383	*949,416	*508,028	*2,015,209	*4,536,852
Amortization of defense projects	1,736,067	1,101,373	135,427	73,533	433,470	349,115	1,167,170	678,725
Equalization	*1,081,161	*1,434,837	*2,385,955	*2,152,508	681,069	193,118	623,725	524,553
All other	1,013,699,590	900,874,100	376,113,974	325,717,765	214,665,166	199,325,320	422,920,450	375,831,015
Maintenance of equipment	1,404,220,127	1,284,877,105	595,368,489	550,063,018	283,569,369	259,221,433	525,282,269	475,592,654
Depreciation	206,874,610	191,713,422	81,588,173	76,949,956	45,878,965	42,349,893	79,407,472	72,413,573
Retirements	*886,828	*482,060	*111,710	*69,081	*239,520	*107,044	*535,598	*305,935
Deferred maintenance and major repairs	*2,988,010	*3,646,470	47,000	247,180	*1,107,454	*1,391,004	*1,927,556	*2,502,646
Amortization of defense projects	12,277,647	12,418,851	4,492,662	4,613,890	2,389,422	2,479,869	5,395,563	5,325,092
Equalization	1,308,153	1,001,874	353,916	50,893	906,942	696,618	47,295	254,363
All other	1,187,634,555	1,083,871,488	508,998,448	468,270,180	235,741,014	215,193,101	442,895,093	400,408,207
Traffic	159,464,601	145,025,702	54,662,535	50,178,997	34,701,366	31,042,514	70,100,700	63,804,191
Transportation—Rail line	3,161,221,992	2,826,679,005	1,338,934,566	1,222,850,333	584,161,926	524,167,019	1,238,125,500	1,079,661,653
Miscellaneous operations	109,810,816	106,632,734	41,616,209	39,689,026	16,222,162	15,588,517	51,972,445	51,355,191
General	224,539,373	201,209,700	85,557,554	77,603,830	48,982,418	43,739,379	89,999,401	79,866,491
Railway operating expenses ‡	6,185,340,861	5,572,138,491	2,536,462,525	2,309,544,655	1,202,098,430	1,092,715,494	2,446,779,906	2,169,878,342
Net revenue from railway operations	1,854,355,636	1,554,312,717	642,486,733	501,035,954	381,934,787	331,314,497	829,934,116	721,962,266
Railway tax accruals	856,620,934	776,627,337	291,497,641	258,988,083	192,405,631	176,651,070	372,717,662	340,988,184
Pay-roll taxes	221,084,008	291,773,907	91,863,795	121,936,276	43,409,506	56,897,154	85,810,707	112,940,477
Federal income taxes†	373,313,451	249,249,031	99,656,018	47,257,793	94,395,202	71,269,875	179,262,231	130,721,363
All other taxes	262,223,475	235,604,399	99,977,828	89,794,014	54,600,923	48,484,041	107,644,724	97,326,344
Railway operating income	997,734,702	777,685,380	350,989,092	242,047,871	189,529,156	154,663,427	457,216,454	380,974,082
Equipment rents—Dr. balance	111,983,623	106,668,112	50,292,858	47,858,711	*13,670,288	*6,544,117	75,361,053	65,353,518
Joint facility rent—Dr. balance	32,126,410	34,284,573	15,451,362	16,623,953	4,621,929	5,271,247	12,053,119	12,389,373
Net railway operating income	853,624,669	636,732,695	285,244,872	177,565,207	198,577,515	155,936,297	369,802,282	303,231,191
Ratio of expenses to revenues(per cent)	76.9	78.2	79.8	82.2	75.9	76.7	74.7	75.0

†Includes income tax and surtax.
‡Includes $13,028,239 accrued in anticipation of major wage awards.
*Decrease, deficit, or other reverse item.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.



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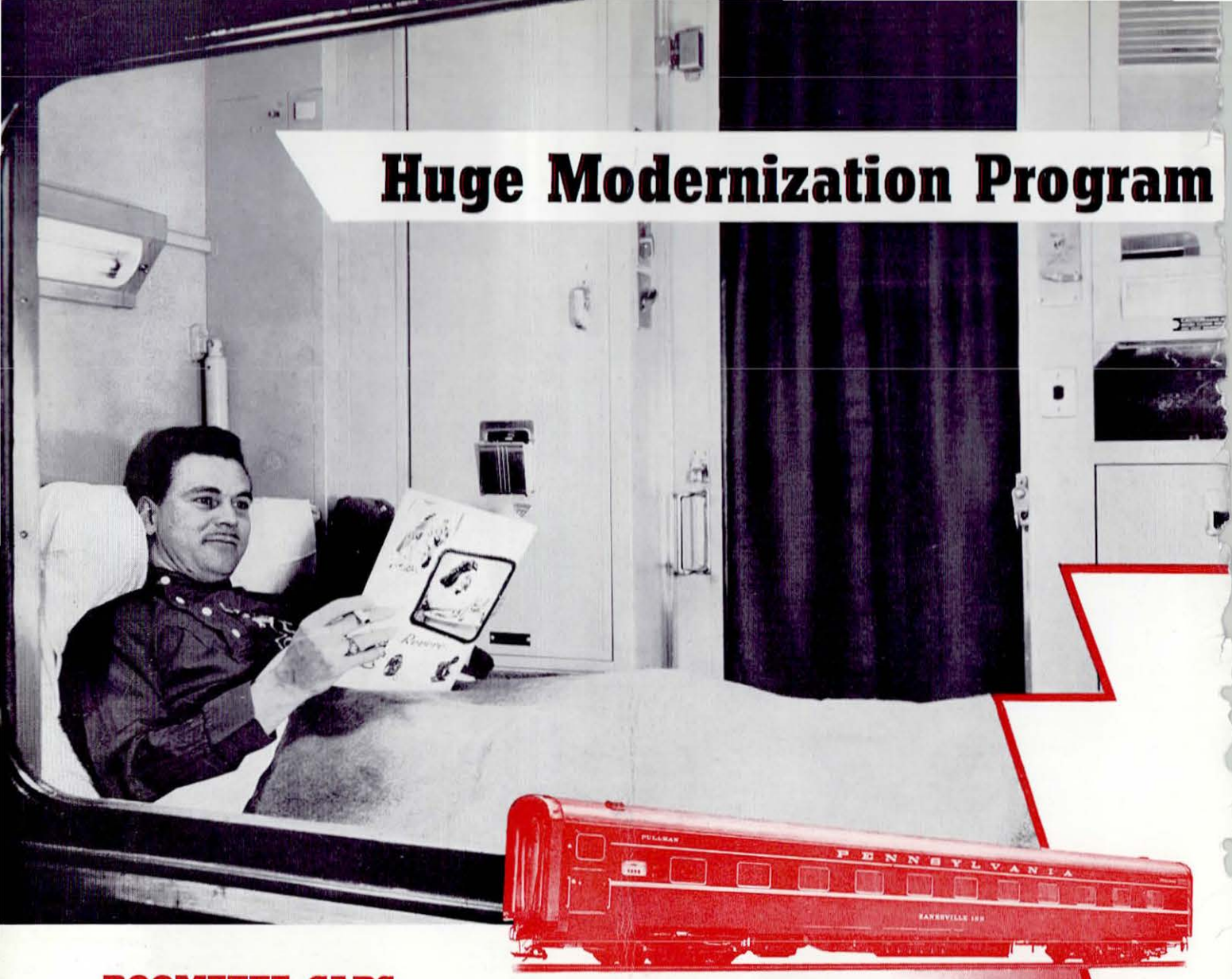
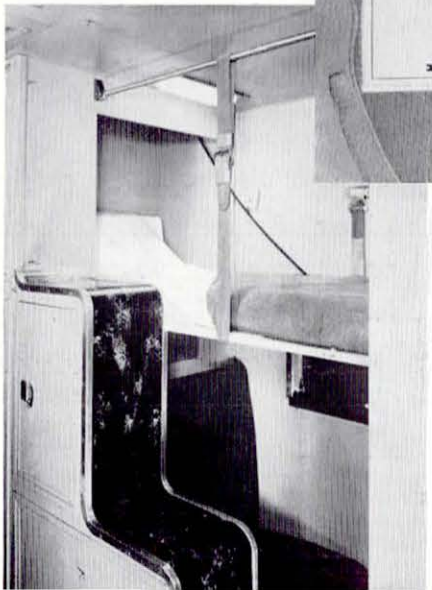


ROOMETTE CARS

New roomettes designed for single occupancy have every facility for carefree privacy. Comfortable sofa seat for daytime travel and a spacious 6'3" pre-made bed equipped with combination spring and rubber foam mattress, lowers from the wall for sleeping.



PORTER'S QUARTERS

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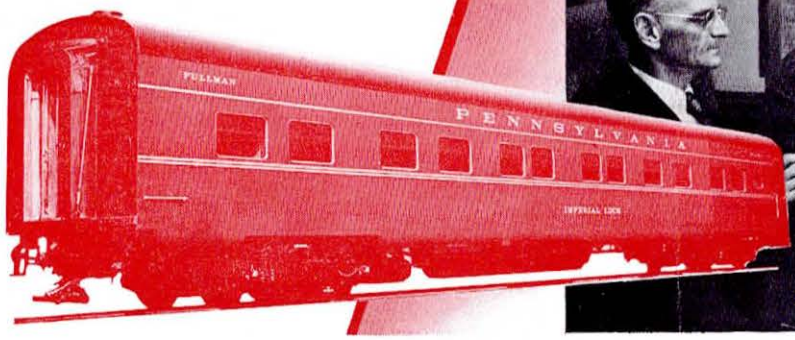
Martin W. Clement, President of the Pennsylvania Railroad, said:

"We have to get back to where we are making money from the passenger business. We hope that the new equipment will help us in that direction."

NEW ALL PRIVATE ROOM SLEEPING CARS now join the overnight coaches and already famous Recreation Cars G.C.F. has built for the greatest modernization program in Pennsylvania history!

All rooms have completely private toilet facilities, full-length wardrobes, wide panorama windows, fluorescent lighting, special reading lamps, and many other features providing the ultimate in convenience and privacy.



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Versatile accommodations are a feature of these cars—truly a "home on wheels"! Each bedroom will accommodate two persons and connecting bedrooms may be occupied en suite when partition is folded back. By day, upper beds disappear into the ceiling, a new space-saving feature. Lower beds form comfortable lounge seats. New compartments, designed for two, also have innovations. New drawing room affords spacious privacy for three—3 full-length beds (2 uppers and a lower) for restful sleeping, and extra length divan and two folding lounge chairs for daytime travel.

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Mechanical superintendents, master carbuilders, shop foremen and others should write for Booklet F-4599A which gives some valuable hints on flame-gouging. Ask your OXWELD field man for guidance on this process.

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GENERAL NEWS

Intensive Drive Inaugurated to Salvage Industrial Steel Scrap

At the request of the Department of Commerce, the Business Paper Advisory Committee of the Advertising Council has inaugurated an intensive campaign to salvage steel scrap from industrial sources, in order to accelerate domestic flow of heavy steel scrap so as to maintain steel mill capacities and build an emergency stockpile.

Industries will be asked to investigate inventories of obsolete machines, and to scrap those not absolutely necessary. Those who contribute will be paid at current price levels through existing salvage channels.

Secretary of Commerce Charles Sawyer, in explaining the urgent need for ferrous scrap, stated:

"Without an increased supply of scrap our domestic economy and foreign aid requirements will not have maximum iron and steel production. During 1947 the iron and steel industry consumed approximately 2,000,000 tons more of purchased scrap than any previous year.

"Despite this, the mills could have produced an additional 3,000,000 tons of ingots and the foundries could have produced an undetermined tonnage of castings if more scrap had been available. The average monthly consumption of scrap in 1948 indicated that 1948 consumption will be more than 3,000,000 tons in excess of 1947.

"It is hoped that the industrial scrap drive will bridge the gap until German and other foreign scrap starts to flow into the country in substantial tonnage. A determined and systematic combing of industries which are large users of machinery and other equipment made of iron and steel that becomes obsolete will produce a substantial scrap tonnage over and above the quantities normally processed."

T. A. A. Appoints Lea as Director Of Governmental Relations

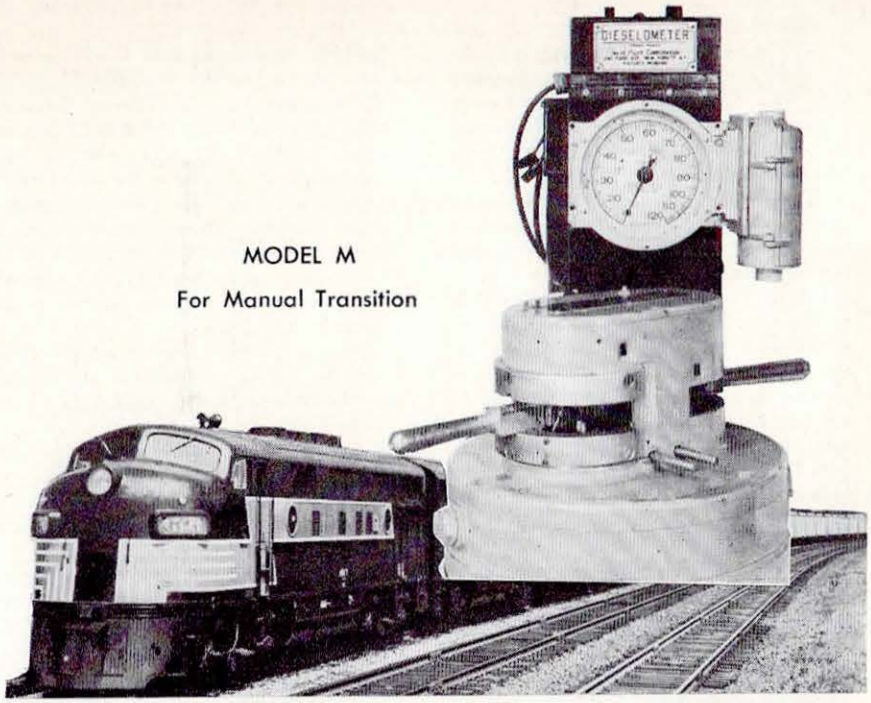
Clarence F. Lea, for 10 years chairman of the Interstate and Foreign Commerce Committee of the House of Representatives, has been appointed director of governmental relations for the Transportation Association of America, with headquarters at Washington, D. C., effective March 1.

The association has also announced the election to its board of directors of Frank B. Bell, chairman of the board of the Edgewater Steel Company, and Herbert A. May, vice-president and director of the Westinghouse Air Brake Company.

Mr. Lea voluntarily retired from public office at the close of the 80th Congress, after having served for 32 years in the House of Representatives. He was a member of the Interstate and Foreign Commerce Committee for 28 years.

In accepting his new appointment, Mr. Lea said:

"I have joined the Transportation Association of America because I believe it is making a sincere and earnest effort to solve one of the nation's most crucial problems. The association, in a strong way, is supporting the transportation survey which I, as chairman of the Committee on Interstate and Foreign Commerce, sponsored two years ago and which Congress unanimously approved. In accepting this assignment I am afforded the opportunity to continue the



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same work in the public interest which I originated in Congress.

"The cornerstones of the nation's public service carriers are competitive private ownership, and public regulation. Upon this foundation we have developed the most adequate and efficient transportation in the world.

"The stability of this great transportation machine is threatened by serious trends. We must anticipate conditions, far different from the present, under which the common-carrier industry as a whole will be faced with such grave problems as to imperil the nation's entire economy. It would be a great misfortune to the country if we failed to act in advance of that time and provide measures to meet such eventualities.

"I wish to ask the head of each great industry, farm group, financial institution, form of transportation and labor organization to assume a high degree of personal responsibility in assisting to bring about a solution of this problem. Each should do his part to generate informed opinion which reflects the true public interest in transportation. I earnestly hope that such collective effort will provide the basis for an impartial and intelligent approach by the Congress."

Donald D. Conn, executive vice-president of the association, commenting on the Lea appointment, said:

"Mr. Lea will act as an impartial public-interest representative. He will be available to counsel with public authorities. He wishes to explore objectively the viewpoints of the different forms of transportation—water, rail, highway, air and pipelines. He will seek to harmonize opinions among the many trade groups—all to the end that a common understanding can be resolved as to those fundamental transportation policies which are necessary for the nation's economy and its national defense."

In a year-end statement, after reviewing the physical make-up of the national transportation plant, Mr. Conn said:

"Total transportation facilities are greater than in all other countries combined, and the cost to users is barely half the cost for comparable service in any other country.

"This vast, vital service has grown like Topsy, giving unexcelled service in peace or war. But because it has developed without a policy or program to assure coordination and direction, it has resulted in over-development and colossal waste which threatens the solvency and efficiency of the entire system.

"Congress for more than 20 years has permitted nature to take its course, failing completely to parallel modern trends with modern policy. In these two decades over $35 billion of taxpayers' funds have been used to build highways and airways, and to expand waterways. The existence of these new basic facilities has changed the entire transportation picture.

"Shippers, utilizing these publicly financed facilities, have gone into the transportation business for their own account in competition with the regulated common carriers. Over 85 per cent of the trucks and 85 per cent of the ships and barges are now used by thousands of such private carriers. And other thousands of so-called contract carriers have entered the business. These agencies are only partially regulated.

"Closely regulated and under constant pressure of competition from unregulated carriers, of class legislation, and of pressure group demands are most of the common carriers.

"Individually, these closely regulated carriers are, as a general rule, conducted on the highest plane of efficiency, but when joined in disastrous competition with private and contract carriers, the transportation system becomes wasteful, costly, and unprofitable. As we enter 1949, the solvency of a majority of common carriers in each field is due only to great efficiency in operations, and transitory high production and a peak volume of traffic.

"National policies are based upon principles adapted to meet conditions existing 40 years ago. Federal regulation is cumbersome and conflicting. Applied to the economy of the past two decades, regulation has resulted in huge losses of the savings of millions of people who, in good faith, invested in various forms of carriers.

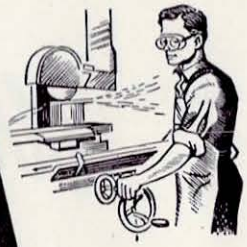
"Unless trends in this industry are soon reversed and Congress designs a national policy dealing with transportation as a whole, in the broad public interest, government ownership of common carriers is inevitable. Such new policy does not mean regulation of every vehicle, or removal of the right of farmers or businessmen to operate their own trucks without bureaucratic edict. But it does mean modernizing policy so that the people of America have efficient, competitive transportation that is not wasteful, and that can maintain itself in the hands of private owners just as other business in the United States should be maintained.

"It is for such purpose that the Transportation Association of America is conducting an Economic-Statutory Project designed to establish common ground of interest between users and investors in transportation, the various transport agencies themselves, and the areas of economic interest throughout the country.

"Failing to act, this country may follow the path of nationalization as in Great Britain and elsewhere.

"A solution of the transportation problem represents the foremost obligation of Congress and the leaders of the enterprise system. It is the most crucial and complicated issue confronting the American people."

Style No. 1



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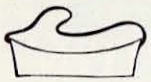

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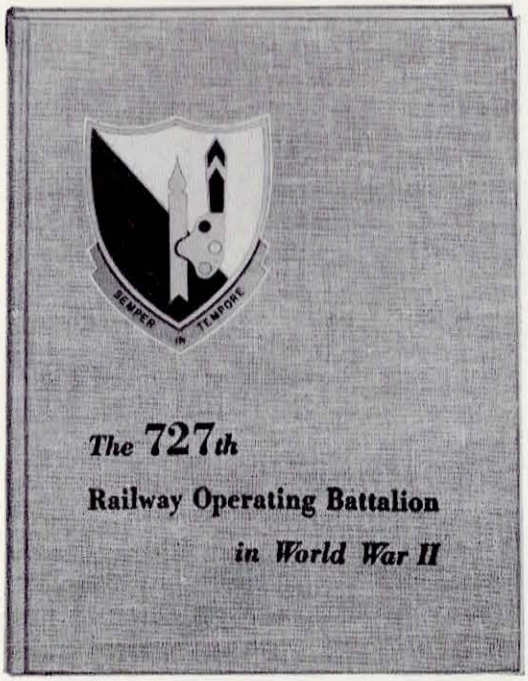
The 727th
Railway Operating Battalion
in World War II



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The exploits of this famous battalion of fighting railroad soldiers is graphically recorded in this official history. From its training period in Alabama under the auspices of the Southern Railway, through its field operations in North Africa, Sicily, Italy, France and Germany its history makes fascinating reading. Two hundred and twenty-five photographs and seven operation maps supplement the text, which is full of human interest sidelights.

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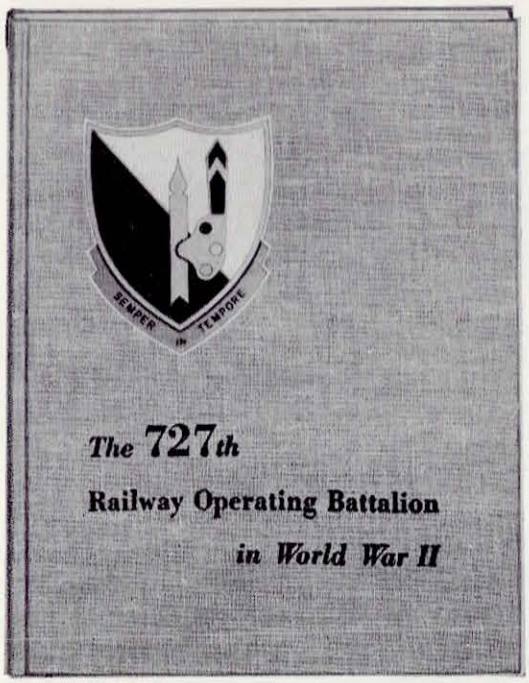

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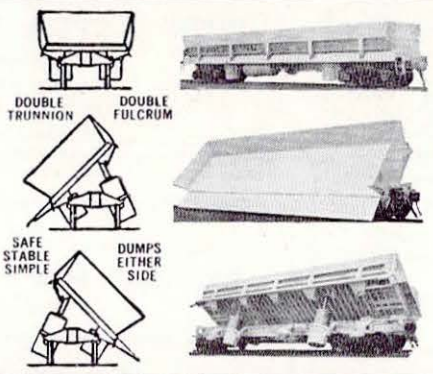

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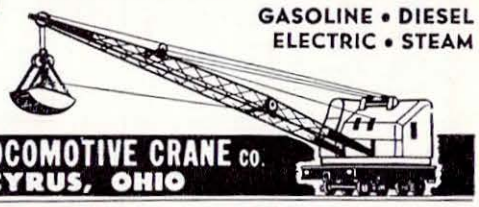

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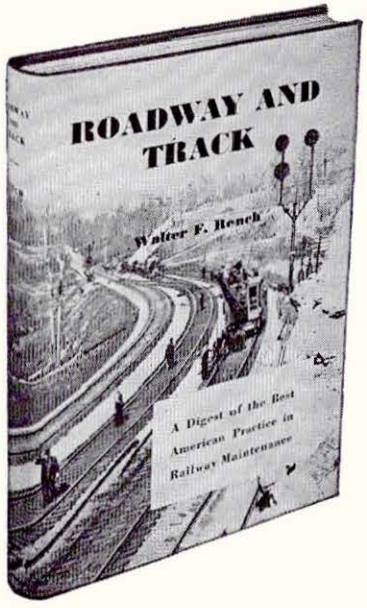

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R. A. 1-22-49

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50 YEARS AGO . . .

On March 30, 1899 a few dozen railway engineering officers met in Buffalo, N. Y. for the first regular meeting of what later developed into the American Railway Engineering Association.

—And on March 15, 16, and 17 of this year nearly 2,000 members and guests are expected to converge on Chicago for the 50th Anniversary Convention of the A. R. E. A. at the Palmer House.

"A Past of Achievement—A Future of Opportunity" will be the theme; and speeches by outstanding railway men and other special features will make the Golden Anniversary celebration an event to remember. An exhibition by the National Railway Appliances Association at the Colosseum, March 14, 15, 16, and 17 will echo the Anniversary theme; and a joint photographic exhibit by the A. R. E. A. and the N. R. A. A. in the foyer of the Palmer House will depict the progress of railway engineering during the past half century.

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Electric Locomotives	265
Freight Cars—(High Speed Service)	2,670
Freight Cars—(Industrial and Misc. Service)	1,144
Passenger Cars	4,958
Steam Locomotives—(Engine Trucks)	4,078
Steam Locomotives—(Drivers)	2,084
Steam Locomotives—(Trailers)	3,255
Steam Locomotives—(Rods)	171
Steam Locomotives—(Reciprocating Parts)	398
Steam Locomotives—(Tenders)	2,576
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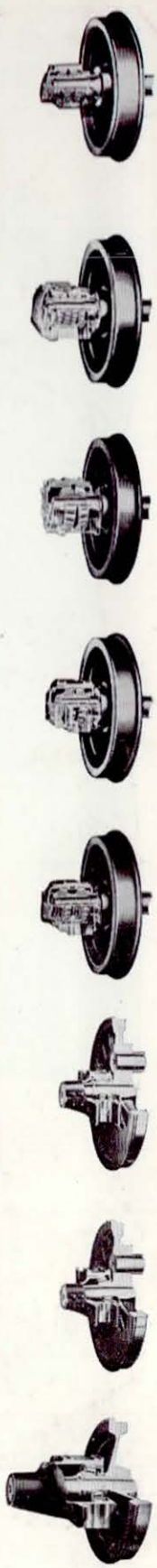

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